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ANNUAL PUBLIC HEALTH REPORT

OF

THE PROVINCE OF ORISSA

FOR THE YEAR

1947



By

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1947

Annual Public Health Report of the Province of Orissa for the year 1947

CHAPTER I

Vital Statistics

1. *Area and population*—The Province of Orissa excluding the integrated States comprises a total population of 87,28,544 according to the census of 1941 and covers an area of 32,198 square miles giving a density of 271 persons per square mile. The statistics given in the report relate to a population of 79,14,487 which is the midyear estimate for 1947 and excludes large portions of Ganjam Agency and Koraput district, where arrangements do not exist for collection of vital statistics.

2. *Provincial birth and death rates*—The Provincial birth rate during the year under report was 26.74 per mille against 27.52 in the previous year and 27.35 in 1945 and the death rate was 26.93 against 23.83 in the previous year and 27.86 in 1945. For the first time the death rate stepped over the birth rate in 1945 and again in 1947. This phenomenon indicates a low standard of vitality of the people.

3. *Registration of births*—The total number of births recorded during the year was 2,11,639, the males being 1,08,990 and females 1,02,649 against a total of 2,16,391, males being 1,11,865 and females 1,04,526 during the previous year. Thus there was a decrease of 4,752 births.

The rural areas recorded 2,04,712 births against 2,08,828 and 2,06,840 and urban areas recorded 6,927 births against 7,563 and 6,815 during the years 1946 and 1945 respectively.

A statement showing comparative figures of birth rates per mille of population in each of the Province^s of the Indian Dominion during 1947 is given below :

Name of Province	Birth rate per mille
(1) Orissa	26.75
(2) West Bengal	24.7
(3) Bihar	17.81
(4) United Provinces	22.91
(5) Central Provinces	34.72
(6) East Punjab	33.4
(7) Bombay	32.87
(8) Madras	32.72
(9) Assam	13.66

This Province recorded a birth rate lower than that of the Central Provinces, East Punjab, Bombay and Madras and higher than that of the Provinces of West Bengal, Bihar, United Provinces and Assam.

The highest birth rate 32.28 was recorded in Angul subdivision and the lowest birth rate 3.63 was recorded in Ganjam Agency. The low birth rate may be attributed partly to the endemic conditions of certain diseases such as yaws, venereal diseases and malaria and partly to the incomprehensive system of recording of vital statistics in the Agency.

In urban areas the Municipality of Berhampur recorded the highest birth rate of 46.93 and the Municipality of Balasore the lowest birth rate of 7.21 per mille of population.

The birth rates of the rural and urban areas of this Province were 26.72 and 27.29 respectively against 27.43 and 30.06 respectively during the previous year.

4. *Registration of deaths*—213,162 deaths were registered during the year under report, out of which 1,07,997 were males and 1,05,165 were females against a total of 1,87,348 during the previous year and 2,17,612 during 1945.

The rural areas recorded 2,07,928 deaths against 1,81,319 during the preceding year and 2,10,760 during 1945 and the urban areas recorded 5,234 deaths against 6,029 during the previous year and 6,852 during 1945.

The Provincial death rate for the year was 26.93 against 23.83 in the preceding year and as such there was an increase of 3.10 per mille over the rate recorded in the previous year.

The death rates in rural and urban areas of this Province were 27.14 and 20.62 respectively against 23.82 and 23.97 during 1946 and as such the death rate decreased in urban areas and increased in rural areas. The highest death rate was recorded in the district of Balasore and the lowest in Ganjam plains, the figures being 33.61 and 3.62 respectively during the year. Among the towns, Puri recorded the highest death rate, being 37.98 and Sambalpur the lowest being 6.80. The highest death rate recorded at Puri covers besides the residents, a very large population of pilgrims from all parts of India who visit the town throughout the year as it is one of the most venerable religious centres of the country.

A statement showing comparative figures of deaths in various Provinces of the Indian Dominion is furnished below :

Name of Province	Death rate per mille
(1) Orissa	26.93
(2) West Bengal	19.60
(3) Bihar	15.16
(4) United Province	16.39
(5) Central Provinces	33.46
(6) East Punjab	19.50
(7) Bombay	25.00
(8) Madras	20.06
(9) Assam	8.75

This Province recorded a lower death rate than Central Provinces and Berar and a higher death rate than all other Provinces.

5. *Mortality according to age, class and sex*—1,07,997 males and 1,05,165 females died during 1947 with a death rate of 28·23 males and 25·72 females against 25·16 males and 25·58 females in the preceding year. 42,455 deaths occurred amongst the infants under one year of age and the mortality rate was 200·60 per mille of live births against 170·82 during the previous year.

There was as usual a difference in the death rate amongst the various classes of community as detailed below :

				Deaths	Death rate
Hindus	..	..	..	2,08,289	31·27
Muhammadans	..	..	..	2,336	19·02
Christians	..	..	..	184	9·76
Other classes	..	..	..	1,753	1·62

6. *Registration of vital occurrences*—Registration of vital occurrences is done through the old channels of the Village Headman in South Orissa and the Chowkidar in North Orissa. A scheme for reorganising the statistical machinery is under consideration of Government.

7. *Publication of Vital Statistics*—Statements showing monthly vital occurrences in rural as well as urban areas, weekly vital occurrences in towns with a population of 30,000 and over and weekly occurrences of principal epidemic diseases, cholera and smallpox in districts were published in the *Orissa Gazette* as usual for the information of general public.

Detection of the omissions in reporting vital occurrences, particularly with regard to births, cannot be carried out efficiently unless adequate public health staff are appointed in each district for which necessary proposals are under consideration.

Cases of vital occurrences were investigated and verified by the Public Health Staff during the year under report. Omissions were also detected.

CHAPTERS II AND III

State of Public Health in the Province and History of Chief Diseases

1. *Epidemiology :—Rainfall*—The average rainfall in the Province during the year under report was 54·69 " against a normal rainfall of 57·36 ". A statement showing the monthly average rainfall in each district of the Province is given below :

Month	Cuttack including Angul	Puri	Balasore	Sambalpur	Ganjam (including Agency and Khond- mals)	Koraput
1	2	3	4	5	6	7
January	0·88	1·76	1·01	0·85	1·02	0·61
February	0·77	0·44	0·71	1·29	0·62	..
March	0·71	0·26	0·75	0·44	0·46	0·9
April	1·22	0·13	0·81	..	0·96	1·48
May	1·95	0·82	2·91	0·11	1·60	1·92
June	9·40	12·69	10·11	8·26	6·31	8·38
July	10·20	8·62	10·52	15·40	9·35	15·27
August	12·16	13·32	10·83	18·39	11·07	16·88
September	5·69	7·80	7·98	4·54	8·37	9·25
October	6·18	6·54	8·51	2·78	6·78	4·26
November .. ..	..	0·25	..	0·04	1·22	0·69
December	3·05	4·24	3·46	0·40	4·93	3·16

2. *The incidence of chief diseases*—The following statement shows comparative figures of deaths with rates per mille of population from various chief diseases during the year under report and the previous year :

Diseases	1946		1947	
	Deaths	Death rate	Deaths	Death rate
Fever	101,720	12.94	124,501	15.73
Cholera	7,209	0.92	4,772	0.60
Smallpox	6,060	0.79	1,689	0.21
Dysentery and Diarrhoea	14,157	1.80	17,449	2.20
Respiratory Diseases	4,731	0.60	4,726	0.60
Injuries	2,565	0.33	2,086	0.26
Other causes	50,906	6.47	57,939	7.32

Cholera—The Province recorded a considerable reduction in the incidence of cholera during the year under report. The total number of deaths from the disease was 4,772 against 7,209 during 1946. Thus the death rate from the disease was 0.60 per mille of population against 0.92 during 1946 and 1.36 during 1945.

The highest incidence of the disease was recorded in the district of Balasore, the total number of deaths being 1,538 and the death rate 1.46. The lowest incidence was recorded in Ganjam plains with a total number of 24 deaths and a death rate of 0.02 per mille of population.

The districts of Cuttack, Puri, Sambalpur recorded 1922, 1209 and 78 deaths during the year with death rates of 0.84, 1.10 and 0.05 respectively. There was only one death in Angul subdivision. Khondmals subdivision, Ganjam Agency and Koraput district were reported free from the disease.

Cuttack district—The incidence of cholera which started during September 1946 was brought under control by the end of January 1947. Stray cases were reported till the end of June and then the disease persisted in an epidemic form till the end of the year.

Puri district—The disease began with 3 deaths in the month of January. Sporadic cases were reported till the end of June. It took an epidemic proportion during July which was the month of Car festivals attracting a large number of pilgrims from all parts of India. The epidemic was brought under control very soon by introducing sanitary and prophylactic measures more rigidly. Stray cases were reported during the remaining months of the year under report.

Balasore district—Stray cases of cholera were reported till the end of April, then it began to spread in a very mild form till the end of September and was subsequently controlled in October. Again it appeared and persisted in a mild form till the end of the year.

Sambalpur district—Stray cases were reported throughout the year under report.

Ganjam plains—Only 24 deaths in all were reported during the year, 18 in July and 6 in September.

The other parts of the Province viz., Angul and Khondmal subdivisions, Ganjam Agency and Koraput districts were almost free from cholera during the year under report.

Amongst the towns, Balasore recorded 15 deaths or 0.73 per mille of population against 2 deaths or 0.98 per mille in the previous year. Sambalpur and Jajpur recorded 9 and 3 deaths or 0.49 and 0.17 per mille respectively against 12 and 9 deaths or 0.66 0.78 respectively in the previous year.

Cuttack, Kendrapara, Puri, Berhampur and Parlakhimedi were free from cholera during the year under report. The urban areas suffered less from the disease than the rural areas, the urban rate being 0.14 against the rural rate of 0.62 per mille of population. This perhaps indicates the urban water-supply to be more satisfactory than the rural supply.

The following table shows the monthly distribution of cholera in the Province during the year under report :

Month	Deaths from cholera
January	136
February	81
March	110
April	167
May	307
June	354
July	957
August	767
September	535
October	269
November	471
December	621
Total	4,778

Prevalence of cholera in an epidemic form and occurrence of other bowel diseases such as diarrhoea, dysentery and gastroenteritis are attributed chiefly to the unsatisfactory condition of drinking water supplies in the Province. The sources of water-supply always remain polluted and are the chief sources of infection when the epidemic breaks out in a particular locality. No doubt sickness and mortality can be considerably reduced when portection or safety of the drinking water-supply is ensured. There are proposals under consideration of Government to make provision in this direction; and to start with annual grants are awarded for improvement of rural water-supply.

Preventive measures—The usual preventive measures of mass inoculation and disinfection of water sources by the Public Health staff was supplemented with temporary workers as and when situation warranted. Besides, educative propaganda was carried out by the staff with lectures and talks; and pamphlets on the prevention of cholera prepared by this Department were also distributed.

Cholera vaccine at an approximate cost of Rs. 19,970 was purchased and supplied by this department to push on inoculation among the mass as a prophylactic measure.

Smallpox—The total number of deaths from this disease reported during the year was 1,689 or 0.21 per mile of population against 6,060 or 0.79 per mile of population during the previous year.

A table showing the distribution of smallpox in the Province by months is furnished below:

<i>Months</i>	<i>Deaths</i>
January	154
Feburary	150
March	188
April	289
May	315
June	152
July	121
August	116
September	78
October	37
November	20
December	69

The highest number of deaths was recorded in the district of Cuttack, there being 546 deaths against 3,344 during previous year. The death rate was 0.23 against 1.45 in the previous year. It prevailed in an epidemic form in the districts of Puri, Sambalpur, Ganjam plains and Koraput, the number of deaths being 397, 386, 130 and 109 or 0.25, 0.31, 0.09 and 2.16 per mille of population respectively against 1,018, 1,159, 162.2 or 0.90, 0.93, 0.11 and 0.04 per mille of population respectively in the previous year.

Sporadic cases were reported from Balasore district, Angul subdivision and Ganjam Agency, there being 56, 42 and 23 deaths or 0.05, 0.23 and 0.06 per mile of population respectively against 335, 35 and 3 deaths or 0.32, 0.20 and 0.01 per mille of population respectively during previous year.

The Khondmals subdivision was free from the disease during the year under report.

The towns of Parlakimedi and Sambalpur recorded 14 and 8 deaths from smallpox or 0.66 and 0.43 per mille of population respectively against 16 and 10 deaths or 0.74 and 0.55 per mile respectively during the previous year. Other municipal towns were free from the disease. The rural areas suffered from the disease more than the urban areas, the death rate being 0.22 in rural areas against 0.09 in urban areas which may be attributed to the fact that primary vaccination is compulsory in all the municipal towns, besides re-vaccination being compulsory in the two southern municipal towns.

The system of licensed vaccinators was abolished consequent on the provincialisation of health services of Local Bodies on the 1st February 1947. Paid Vaccinators at the rate of one per 50,000 of population in rural area were provided and it is hoped that the state of vaccination will appreciably improve. 622,901 doses of vaccine lymph worth Rs. 25,955 were purchased from the Vaccine institute, (Government of Bihar), Namkum, Ranchi, against 935,642 doses worth Rs. 35,030 in the previous year. 722,024 vaccination operations, 1,71,441 being primary and 5,50,583 re-vaccinations were performed during the year against 11,26,966 (2,13,414 primary and 9,13,552 re-vaccinations) during the previous year.

Although vaccination is recognised to be the only weapon to fight against smallpox it has not yet gained popularity in those quarters where superstition still holds its strong foothold. When smallpox breaks out in an epidemic form, people reluctantly get themselves and their children vaccinated. When persuasion fails legislation is warranted. Temporary regulations under the Indian Epidemic Disease Act, 1897 were promulgated making vaccination compulsory in the district of Sambalpur for one year with effect from the 17th September 1947.

Plague—The Province was free from plague during the year. Consequent on the outbreak of plague in an epidemic form in the districts of Chindwara, Jubbulpore, Saugor, Hoshnabad, Raipur, Bilaspur, etc., in the Central Provinces and Berar, which adjoin this Province, mostly in the Sambalpur district, temporary regulations under the Indian Epidemic Diseases Act of 1897 were promulgated imposing restriction on the people coming from Central Provinces to this Province with effect from the 26th February 1947 and the restrictions remained in force till the close of the year.

Government sanctioned a grant of Rs. 4,500 to take preliminary measures as a precaution against possible introduction of the disease into the district of Sambalpur.

1,000 c. cs. of plague vaccine were purchased from the Haffkine Institute, Bombay, and kept ready as follows to meet any emergency that might arise :

District Health Officer, Sambalpur	..	..	..	300 C. C.
Health Officer, Puri Municipality	..	..	..	300 C. C.
Reserve at Orissa Medical College Hospital, Cuttack	..	..	..	400 C. C.

Public Health staff were stationed in various routes leading from Central Provinces to this Province through Sambalpur to guard against the possibility of importing the disease.

Dysentery and Diarrhoea—A larger number of deaths from dysentery and diarrhoea was recorded in both rural and urban areas. 16,728 deaths were reported in rural areas against 13,466 deaths during the previous year and 721 deaths were reported in urban areas against 691 deaths in the previous year. The rural mortality rate was 2.18 per mile against 1.77 in the previous year. The urban mortality rate was 2.84 against 2.75 in the previous year.

Highest death rate was recorded in the district of Cuttack, the figure being 3.67 and the lowest death rate was recorded in the subdivision of Angul, the figure being 0.27. Balasore, Puri, Sambalpur, Ganjam plains, Ganjam Agency, Koraput and Khondmals recorded death rates of 0.65, 2.98, 0.39, 0.98, 0.22, 1.38 and 0.51 respectively.

Among the towns Puri recorded the highest death rate of 5.71 per mile and the lowest death rate of 0.98 was recorded at Sambalpur. The towns of Cuttack, Balasore, Kendrapara, Jajpur, Berhampur and Parlakimedi recorded 2.71, 2.94, 4.56, 1.04, 2.14 and 2.63 respectively.

Respiratory Diseases—4,726 deaths from respiratory diseases were reported during the year giving a mortality rate of 0.60 against 4,731 deaths giving almost the same mortality rate during the previous year. The mortality rate in 1945 was 2.09 the deaths being 17,093. High incidence was recorded in the districts of Sambalpur, Cuttack, Ganjam plains and Puri, the mortality being 1,268, 1,154, 968 and 708 or 1.02, 0.52, 0.70 and 0.64 per mile respectively against 1,117, 1,128, 1,140 and 732 or 0.91, 0.51, 0.83 and 0.67 respectively in the previous year.

Low incidence was recorded in Balasore, Ganjam Agency and Koraput districts and in Angul and Khondmals subdivisions where 130, 65, 17, 15 and 6 deaths were reported respectively giving rates of 0.12, 0.18, 0.34, 0.08 and 0.07 per mile of population against 64, 78, 15, 13 and 35 deaths or rates of 0.06, 0.22, 0.31, 0.07 and 0.28 in the previous year.

Among the towns the highest incidence was recorded at Puri and Berhampur, deaths being 120 and 103 or 2.77 and 2.18 per mile of population respectively against 93 and 132 or 2.17 and 2.82 per mile respectively in the previous year.

The towns of Parlakimedi, Kendrapara, Balasore, Sambalpur and Jajpur recorded 53, 32, 20, 8 and 5 deaths or mortality rates of 2.45, 2.80, 0.98, 0.43, 0.43 respectively against 32, 41, 25, 17 and 8 deaths or mortality rates of 1.48, 3.57, 1.24, 0.94 and 0.70 respectively in the previous year.

A large per cent of deaths from this group of diseases is claimed to be from pneumonia and pulmonary tuberculosis which are included in this group. Urban areas appear to have suffered more than rural areas. This is not an uncommon phenomenon.

There is only one clinic in the Province at the headquarters. Besides its usual activities such as detection, prevention and treatment, sample surveys in the Cuttack, Puri and Sambalpur towns were undertaken. During the year under report 672 cases attended the clinic, including 73 cases of the previous year; and the number of repeat cases was 2,575. 116 X-Ray plates were taken and 312 specimens of sputum, 59 specimens of stool and 7 specimens of urine and 247 specimens of blood were examined. 9 maunds and 21 seers of milk and 49 lbs. of Cod Liver Oil were given to the deserving patients as extra nutritive food.

Propaganda against the disease was carried out as in the previous year. The Health Visitors visited 1,140 houses and gave 205 talks in the Municipal area of the Cuttack town. Pamphlets and leaflets on tuberculosis were distributed.

CHAPTER IV

Fairs and Festivals

Orissa is a land of temples and sacred places which are associated with fairs and festivals of varying sizes. These occur almost throughout the year, and most of them are of local interest, but unhappily they have been a strong foothold of epidemic diseases, specially of cholera. There was no occurrence of epidemic diseases worth mentioning during the year under report.

The most important and famous among the festivals are the car festivals of *Lord Jagannath* at Puri. These festivals are a combination of the Snan, the car and the return car festivals.

During the year under report the festivals took place during the period from the 3rd to the 30th June and about 2,50,000 pilgrims attended the festivals from all parts of India against 1,75,000 in the previous year.

Special Sanitary and Public Health measures were arranged. For this, 9 Sub-Assistant Surgeons and Health Inspectors were temporarily deputed by the Department to Supplement the Municipal Public Health staff. The services of the Sub-Assistant Surgeon attached to the Leper Colony, Puri, were also utilised.

Besides the above additional staff the Municipality of Puri temporarily engaged 18 writers to write anti-cholera inoculation certificates and 36 coolies to assist the health staff in disinfection and inoculation work. The Lodging House Committee also appointed temporarily one Sanitary Health Inspector to assist the Health Officer of the Municipality in inspecting and controlling the lodging houses and Dharmasalas situated in the town during the festival period.

To ensure better and efficient sanitation during the festival period, double conservancy service was arranged by recruiting extra sweepers and they worked both morning and evening under heavy strain to keep the whole town always in a good sanitary condition.

Preliminary chlorination of all private wells was carried out before the festival period as usual. Samples from the public piped water-supply were examined and the supply was chlorinated as an extra measure of safety but unfortunately 24 hours' supply could not be made available due to some breakdown in the main works and consequent reduction in the yield of the service pumps.

Dharmasalas and lodging houses of the town could not provide adequate accommodation for the pilgrims and consequently they were overcrowded. These places were effectively inspected by the health staff and the executive officers of the Revenue Department. 39 reports were made of infringement of the provisions of the Places of Pilgrimage Act.

Majority of the pilgrims generally depend on Mahaprasad for their food but it was not available in time as regular supply could not be ensured by the Temple authorities. The pilgrims had to resort to unwholesome cakes and sweets supplied by their agents and as a result some of them suffered from gastro-enteritis.

It is regretted to note that the stalls of *Mahaprasad* inside the temple premises were kept exposed to dust and flies and no action was taken by the temple authorities to prevent the nuisance. It is desirable that the Health Officer of the Municipality should have supervision and control on the storage and sale of *Mahaprasad* without interfering the religious observations of the temple. During the festival period 11 cases of cholera, 3 cases of bacillary dysentery and 121 cases of diarrhoea were reported. All the eleven cases of cholera, one case of bacillary dysentery and 98 cases of diarrhoea were recorded among the pilgrims. Only two cases of cholera ended fatally. Most of these cases occurred among the pilgrims from West Bengal.

Strict inspection of shops and hotels was made by the health staff under the Orissa Prevention of Adulteration and Control of Sale of Food Act. Six samples were sent for analysis and the articles found unfit for human consumption were destroyed.

61,294 anti-cholera inoculation were performed, 11,722 among residents and 49,572 among pilgrims during the Car festival period.

Necessary propaganda was carried out by the Publicity Section of the Health Department with the aid of the Publicity Van lent by the District Publicity Officer, Puri.

Special circular letters were issued to all concerned for taking preventive measures against infectious diseases, especially cholera.

The Bengal-Nagpur Railway authorities took preventive measures throughout the Railway lines as usual. Special measures were instituted at the Railway Station in the district of Puri by the District Health staff in full co-operation and collaboration of the Railway authorities.

Thanks are due to the following voluntary organisations for willing and valuable services rendered by them in the interest of the pilgrims and the public :

- (1) Puri Seva Samiti
- (2) Bhagat Juvak Seva Sangh
- (3) Orissa Yubak Seva Sangh
- (4) Puri District Hindusthan Scout Association
- (5) The Bharati Library
- (6) The Bharat Seva Sangh
- (7) The Orissa Branch of St. John Ambulance Brigade Division I.

Lieut.-Colonel P. L. O'Neill, the then Director of Health and Inspector-General of Prisons, Orissa, with the Assistant Director of Public Health, inspected the sanitary and public health measures made in connection with the festival.

The Hon'ble Minister of Health visited Puri during the *Mela* period and took special interest in the Sanitary and Public Health arrangements. The sanitation of the town was maintained at a higher level of efficiency during the *Mela* period.

Government sanctioned a grant of Rs. 14,526 to the Municipality and Rs. 1,400 to the District Board Puri, to meet the expenditure in connection with Sanitary and Public Health arrangements.

Besides this, two important *Melas* were held—the Chandaneswar *Mela* in the district of Balasore and the Chandrabhaga *Mela* at Konark in the district of Puri. About 50,000 people attended each *Mela*. Necessary Sanitary arrangements were made by the District Public Health staff and the festivals ended smoothly.

CHAPTER V

Urban Sanitation

There are 8 Municipalities in the Province. Two first class Medical Officers of Health are employed in the Municipalities of Cuttack and Puri and one Assistant Health Officer in the Municipality of Berhampur, all of them being paid from the Provincial revenue.

The services of the following Municipal Public Health staff were provincialised with effect from the 1st February 1947 :

<i>Cuttack Municipality</i>							
1. Health Inspectors	..	..	..	..	..	..	6
2. Clerk	..	..	..	..	..	..	1
<i>Puri Municipality</i>							
1. Health Inspectors	..	..	..	..	..	..	2
2. Clerk	..	..	..	..	..	..	1

Berhampur Municipality

1. Health Inspectors 3

Parlakemedi Municipality

1. Health Inspector 1

Kendrapara Municipality

1. Health Inspector 1

Jajpur Municipality

1. Health Inspector 1

Balasore Municipality

1. Health Inspector 1

Sambalpur Municipality

1. Health Inspectors 2

Five posts of Assistant Health Officers, one for each of the remaining Municipalities of Kendrapara, Jajpur, Balasore, Sambalpur and Parlakimedi were created with effect from the 1st February 1947 under the scheme of provincialisation of health services of Local Bodies, but due to non-availability of qualified hands the posts remained vacant till the close of the year. The sanitation of these municipalities was looked after as before by qualified Health Inspectors.

The Orissa Prevention of Adulteration and Control of Sale of Food Act and Madras and Bengal Vaccination Acts were in force in all the Municipalities. The provisions of the Acts were strictly given effect to in the Municipalities of Cuttack, Puri and Berhampur and it is hoped that other Municipalities will fall in line as soon as qualified Assistant Health Officers are appointed for each of them.

Recording of Vital occurrences was carried on in the Municipalities of Cuttack, Puri, Berhampur, Balasore, Jajpur, Kendrapara, Sambalpur and Parlakemedi as usual by the staff engaged by the Municipalities concerned.

The Municipalities of Berhampur and Puri have protected piped water-supply but the supplies have fallen short of present requirements due to gradual increase in its population. The drainage system in almost all the Municipalities is much below the standard. Proposals for installation of protected water-supply and drainage in these towns have been included in the Post-war Schemes which are under consideration of Government.

Expenditure on Sanitation in Municipalities—A statement showing receipts and expenditure on Sanitation during the year under report is furnished below :

Total number Municipalities	Total receipts including opening balance		Head of expenditure	1945-46	1946-47	Percentage of expenditure to the total receipts	
	1945-46	1946-47				1945-46	1946-47
1	2	3	4	5	6	7	8
8	Rs. 15,71,509	Rs. 29,29,763	Conservancy ..	Rs. 2,94,662	Rs. 4,31,750	18.8	14.7
			Drainage ..	15,917	23,376	1.0	0.8
			Water-supply ..	38,923	39,445	2.4	1.3
			Vaccination ..	5,624	5,134	0.3	0.2
			Epidemics ..	23,912	31,821	1.5	1.1
			Markets and Fairs	8,150	23,045	0.5	0.8
			Other sanitary charges ..	3,452	2,244	0.2	0.1
			Public Health staff	14,549	16,673	0.9	0.6
			Total ..	4,05,189	5,73,508	25.9	19.6

Chief Sanitary works in Municipalities—The detailed expenditure under the head is dealt with separately in the appended report of the Superintending Engineer, Public Health Circle.

CHAPTER VI

Rural Sanitation

The Rural Health Services which were under District Boards were provincialised from the 1st February 1947. The Civil Surgeons of Ganjam, Koraput and Cuttack remained in charge of the Public Health administration of Ganjam Agency, Koraput and Angul subdivision respectively as in the last year. Although a post of District Health Officer was created for Koraput district, it remained vacant for want of a qualified officer and the Civil Surgeon was in charge. Previously there was one Health Inspector in Angul subdivision. Under the provincialisation scheme a post of the Assistant Health Officer and that of a Health Inspector was created. Consequent on the provincialisation of the services of vaccinators, the system of licensed vaccinators was suspended and all the vaccinators were paid from the provincial revenue.

No change was affected in the system of registration, collection and transmission of vital statistics in the rural areas. It continued to be unsatisfactory as before. A scheme for revising the statistical organisation is under consideration of Government.

The Orissa Prevention of Adulteration and Control of Sales of Food Act is not operating in rural areas. Consequently a good deal of adulteration of foodstuffs went on as usual. Proposals for enforcing the Act in rural areas is under consideration of Government and it is hoped that it will go a long way in improving the health of the public and in the control of epidemics.

Due to want of skilled midwives and *Dais* in sufficient numbers, no provision could be made for infant and maternal welfare in rural areas. Something could be done to ameliorate conditions in this direction as soon as trained Midwives and *Dais* are posted to rural areas, a scheme for which is under consideration.

Unsatisfactory water supplies are mainly responsible for the endemic manifestation of bowel diseases in rural areas, particularly at the beginning of the rains when all the water sources are polluted. Hook-worm infection gives rise to anaemia and debility among the rural population which is a set back to the improvement of economic conditions. This infection is attributed to indiscriminate pollution of soil with human excreta. To put a stop to defaecation, bore-hole latrines, which are cheap and easy to construct, are being encouraged.

The incidence of malaria and filaria is fairly high in the rural area due to the existence of large number of tanks, *Dobas*, full of weeds which are favourite resorts for mosquito breeding. Should the Local Bodies, who are primarily responsible to keep the water sources clean, take effective measures to keep them free of weeds, it would go a great way in reducing the incidence of these wasting and ugly diseases in rural area and by the by it might help the rural folk in improving their economic conditions.

Skin diseases of various types are commonly prevalent among the rural public, which are chiefly due to the unclean habits of the people. Mass education which is now in progress is the only successful preventive measure.

The Health Inspectors' Training Class for the year 1946-47 which commenced from the 10th August 1946 with 27 students on the roll continued till the 5th June 1947. Out of 26 students appeared at the qualifying examination, 24 candidates came out successful. The two failed candidates underwent practical training for three months at their own cost and came out successful in the supplementary examination held in January 1948.

The Health Inspectors' Training Class for the year 1947-48 commenced from the 23rd August 1947 with 30 stipendiary students on the roll and continued till the end of the year. Three students left the class before they appeared at the qualifying examination.

Government were pleased to sanction a stipend of Rs. 20 to each of the 27 students during 1946-47 and 30 students during 1947-48.

The training class was held in the Cuttack Training College through the courtesy of the Director of Public Instruction, Orissa.

The following statement shows the receipts and expenditure of the District Boards on Sanitation :

Number of District Boards	Total receipts including opening balance		Heads of expenditure	1945-46	1946-47	Percentage of expenditure to the total receipts	
	1945-46	1946-47				1945-46	1946-47
1	2	3	4	5	6	7	8
	Rs.	Rs.		Rs.	Rs.		
6	21,46,210	31,97,164	Conservancy ..	41,244	55,530	1.9	1.01
			Drainage ..	3,160	2,625	0.1	0.08
			Water-Supply ..	14,134	21,970	0.6	0.6
			Vaccination ..	37,743	37,464	.3	1.2
			Epidemics ..	7,689	6,057	0.3	0.2
			Markets and Fairs	6,861	4,509	0.2	0.1
			Other Sanitary Charges ..	..	2,061	..	0.06
			Public Health Staff ..	1,01,228	1,22,769	4.7	3.8

In this connection it is noted that the Health Services of the Local Bodies have been provincialised with effect from the 1st February 1947 and as such a sum of Rs. 1,305 has been incurred on this account during the financial year 1946-47.

CHAPTER VII

Fever

There was an increase of 22,781 in the number of deaths from fever during the year under report as compared with that of the previous year. The total number of deaths from fever during the year was 1,24,501 or 15·73 per mille of population against 1,01,720 or 12·94 per mille in the previous year.

58 per cent of total mortality from all causes was from fever alone. Although “when it doubt, call it fever” is the motto of the village chowkidar, majority of the cases so reported are due to fever and of these a lion’s share is claimed by malaria.

The highest death rates were recorded in Khondmal subdivision, Balasore district, Angul subdivision, Sambalpur and Cuttack districts, the death rates being 26·93, 24·28, 23·02, 17·83 and 17·64 per mille of population, respectively. Among towns Kendrapara, Jajpur, Puri and Berhampur recorded death rates of 18·05, 9·03 and 6·68 and 6·10 respectively.

Since introduction of anti-malaria measures by means of water suspension of D. D. T. it is hoped that the increase can be controlled successfully.

A statement showing monthly mortality from fevers during the year under report as compared with that of the previous year is furnished below :

<i>Month</i>					1946	1947
January ..	..	..	..	..	11,203	11,722
February ..	..	..	..	..	8,153	9,564
March ..	..	..	..	..	9,025	9,791
April ..	..	..	..	..	9,054	9,378
May ..	..	..	..	..	8,136	9,577
June ..	..	..	..	..	6,321	8,612
July ..	..	..	..	..	6,802	10,426
August ..	..	..	..	..	7,256	11,087
September ..	..	..	..	..	8,071	11,539
October ..	..	..	..	..	7,955	10,034
November ..	..	..	..	..	8,897	10,741
December ..	..	..	..	..	10,847	12,030

Malaria—The malaria problem of this Province is stupendous. It is prevalent in the coastal districts and in the Agency areas of Ganjam and Koraput districts. This disease is more prevalent in rural areas due to the existence of innumerable tanks, ditches, *Dobas*, etc., which are the most favourite places for mosquito breeding. Water collections close to residential houses in the villages and shallow excavations on the sides of the road running in the country side contribute sufficient scope for the breeding of mosquitoes.

The two control units which were established, one at Cuttack and the other at Koraput during 1946 under the Post-war scheme, carried out anti-mosquito and anti-malaria measures respectively. The survey unit which was started in the month of August 1946 at Bhubaneswar to make a survey of malaria incidence in the locality in connection with the location of the Provincial headquarters there continued its activities during the year under report. The Provincial Malaria Unit with its expansion sanctioned in the Post-war Scheme and attached to the Public Health Directorate at Cuttack continued to function as in the previous year.

The anti-malaria gangs continued to work in various centres in the district of Koraput as before except the gang at Koraput town which was merged in the control unit stationed there. The anti-mosquito gang, which was working in Cuttack Municipality, was also merged in the Malaria Control Unit, Cuttack.

Routine anti-malaria operations were carried out by Local Bodies in rural and urban areas except Cuttack Municipality as in the previous years, the charges being met from their funds.

CHAPTER VIII

Maternity and Child Welfare

During the year under report 7 Maternity and Child Welfare Centres functioned at Cuttack, Puri, Balasore, Sambalpur, Berhampur, Bargarh and Russelkonda in an organised basis under the management of the local Maternity and Child Welfare Committees. Ten Maternity Centres at Koraput, Jeypore, Omerkote, Parlakimedi, Rayagada, Bhadrak, Khurda, Hatigarh, Angul and Purushottampur carried on their activities under the control of the local Medical Officers. In the latter part of the year, the Maternity and Child Welfare Centre, Sambalpur, was provincialised. The Maternity Centre at Purushottampur was closed as it did not work well. The services of the *Dais* appointed at Chaudwar, Ballikuda and Binjharpur in the district of Cuttack and at Satyabadi in the district of Puri were retained. A proposal for establishment of 6 new Maternity Centres for providing domiciliary midwifery service in rural areas, one in each of the six districts of the Province, was also considered by the Red Cross Society. The scheme will be given effect to during 1948.

Due to non-availability of women medical licentiates and Health Visitors, the post of the Maternity Supervisor of the Lady Lewis Maternity and Child Welfare Centre, Balasore, was temporarily converted into that of a midwife. The services of the Midwife appointed at the Lady Hubback Maternity and Child Welfare Centre Cuttack in place of Health Visitor were also retained. So also the services of Midwife at Puri and Nurse-midwife at Berhampur were also retained.

As usual, Government sanctioned annual grants of Rs. 2,240 and Rs. 1,500 for the upkeep of Maternity and Child Welfare Centres at Cuttack and Balasore respectively and for distribution of multivitamin tablets and Red Cross milk to children, expectant and nursing mothers through the staff of the centres concerned.

Anti-natal and Post-natal Clinics were held regularly on fixed days, twice a week in almost all the Urban Maternity and Child Welfare Centres. The Lady Doctors entrusted with the supervision of *Dais*' work carried on their duties efficiently by regular visits to homes of patients in afternoons.

During the year 7 Pupil-midwives on Government stipend and one general-trained Nurse were admitted to the Midwifery Training School, Berhampur. The Orissa Medical College Hospital and Baptist Mission Hospital, Berhampur, also trained midwives. Altogether seven candidates appeared for the final examination for Diploma in Midwifery and all of them came out successful. Two hundred copies of the book entitled "A Text Book of Midwifery for Nurses in Oriya" were printed at a cost of Rs. 659 of which the Countess of Dufferin Fund contributed Rs. 450.

The number of Pupil-*Dais* receiving training under the auspices of Victoria Memorial Scholarship Fund was raised from 22 to 24. Twenty-two *Dais* were trained during the year under review. The *Dais* employed under the District Board, Sambalpur, attended the Refresher Course organised at the Headquarters Hospital, Sambalpur.

A scheme to train 60 indigenous *Dais* at the Headquarters Hospitals at Cuttack, Berhampur and Puri with the financial assistance of the Dufferin Fund is under contemplation.

CHAPTER IX

Medical Examination of Scholars and School Hygiene

The School Medical Officer, Orissa, inspects all the High Schools and those Middle English Schools which are situated along with them. The students of other Middle English and Middle Vernacular Schools are examined by the District Board Dispensary Doctors. Medical examination of students reading in Primary Schools is not taken up as the number of such schools are too large for the existing Government and District Board Medical staff, although such an examination is considered essential.

Medical Examination of students was conducted in 31 schools of which only one was an M. E. School and the total number of students examined in all these schools was 3,471 of whom 2,268 were found defective and recommended for treatment. The total number of old defective students was only 664 and of them only 397 or 60 per cent received treatment and were either cured of their ailments or improved.

As many of the schools were not visited last year due to the effect of change in the school session the total number of new entrants admitted in two years was more than the school Medical Officer could cope with and consequently greater number of old defective students could not be examined. During medical examination attempt was made to detect even very minor defects without any omission. The following procedure was adopted in conducting medical examination :

- (1) A short test for normal vision
- (2) Clinical examination of the bare body including heart, lungs, ear, nose and throat.
- (3) Examination of private parts which commonly helped to find out skin diseases and leprotic patches and also to detect phimosis, hydrocele, hernia and other diseases of the genitals.

After the last medical examination, the guardians of all the defective scholars had been intimated about the defects in their wards. In some schools the guardians could not procure any treatment for their boys and expressed their inability and in those cases the school authorities had helped such boys in procuring treatment.

Defectives—The total number of students examined during the year was 3,471 and the number of students recommended for treatment was 2,268. Of the total number examined 65.35 per cent were found defective as compared with 64.85 per cent of the last year. There has been very little difference in the figure owing to the fact that most of the students hailed from villages and communities where the standard of living was very low and the environmental hygiene has much to be improved. These students gradually improve in their health and their ailments disappear when they live for a few months a regulated life in better surroundings. Their diet and habits change and often their long-neglected ailments are treated. A large number of schools have been located in malaria-affected areas and the defective index in those schools is much higher than other schools. It is desirable that some anti-malaria drugs should be distributed among the deserving scholars.

Treatment of defectives—No satisfactory arrangement has yet been possible to get the defects and diseases treated. It is desirable that school clinics should be established which will go a great way in ameliorating the condition of the health of the student. The percentage of common defects detected among the students examined are as follows :—

					Per cent
(1) Malnutrition	..	..	..	624	18.00
(2) Granular lids	..	..	..	154	4.44
(3) Defective sights	..	..	..	222	6.4
(4) Squint ..	..	..	..	11	.31
(5) Caries teeth	..	..	..	192	5.53
(6) Pyorrhoea	..	..	..	91	2.62
(7) Stammering	..	..	..	10	.3
(8) Enlarged tonsils	..	..	..	402	11.6
(9) Anaemia	..	..	..	89	2.56
(10) Vitamin deficiencies	..	..	..	271	7.8

					per cent
(11) Ringworms	..	..	..	98	2.8
(12) Scabies	..	..	..	333	9.6
(13) Spinal curvature	..	..	..	75	2.16
(14) Stoop shoulders	..	..	..	35	1.0
(15) Flat foot	..	..	..	21	.6
(16) Enlarged spleen	..	..	..	565	16.27
(17) Leprosy	..	..	..	35	1.0
(18) Hydrocele	..	..	..	104	3.4
(19) Hernia ..	..	..	..	29	.84
(20) Phimosis	..	..	..	217	6.25
(21) Other defects and diseases	..	..	..	172	4.95

In comparison with the figures of general nutrition of last year it appeared that the figure under good nutrition has gone up from the 20.5 per cent to 26.85 per cent while the figures under fair and ill nourishment had come down from 64.1 per cent and 15.3 per cent to 55.16 per cent and 18 per cent respectively. The reason may be attributed to the rapid change in the financial condition of the people at this moment and the scarcity of foodstuffs.

Most of the High Schools introduced the scheme of supplying midday refreshment to the scholars.

Vaccination—6.68 per cent of the students were found without successful marks of vaccination as compared with 3.7 per cent of the last year and the difference was due to the examination of mainly new entrants who come from rural areas where they escaped vaccination. In all these cases advice was given for immediate vaccination in the school in the presence of the school authorities.

Leprosy—Best attention was given to detect the patches of leprosy on the persons of the students. During the year under report 35 cases or 1 per cent of students were found with this disease. All these cases were early neural patches and were not contagious and so no suggestion was given to exclude them from the school. In all cases personal advice was given to all parties concerned including the Headmasters regarding systematic treatment. Special instructions were given on the health cards of these students to undergo bacteriological examination and to produce certificates from the Bacteriologist as to whether they were in an infective stage. The few old cases presented in different schools were found nearly cured and they were advised to continue the treatment for some time more and always try to raise the level of their health by regular physical exercise and nutritious diet.

Out of 664 old defective scholars re-examined, 397 or 60 per cent of them were found free from the defects detected.

The hygiene lectures which were being delivered to the matric and pre-matric students have been considered by the Department to be of little use on the introduction of compulsory science in the curriculum of the University in which physiology and hygiene are subjects of study. The School Medical Officer is now free to devote all attention to the medical examination of scholars. Only 18 lectures were delivered to the teachers of primary schools during summer vacation.

Physical training—Regular physical exercise is essential for full utilisation of food and better building of body and mind. In many schools the subject is not received in right earnest and is taken as a matter of courtesy. However a new spirit is now gaining ground through the initiation of the departmental instructor and some students have started showing zeal in it. Better results can be achieved in due course.

Housing conditions—Most of the old schools have got *pucca* buildings with adequate arrangement for ventilation and the authorities maintained them in good condition by regular annual repairs. Most of the new schools in rural areas have got kutcha houses with mud floors, mud walls and thatched roofs with inadequate arrangement for ventilation. These schools were allowed to run in an unsatisfactory housing condition with the contemplation of having permanent pucca houses in near future. Some schools have got unhygienic *kutcha* houses for their hostel purpose and the boys have been allowed to live there under most unhygienic condition. It is hoped that the sanitary condition of these hostels should be improved in near future. Out of 31 High Schools about 18 schools have no latrine. Construction of bore-hole latrines may be attempted in their places. In most of the hostels drinking water is procured from shallow or surface wells which are always opened to contamination. This practice should not be encouraged. In almost all parts of the Province the food supply in the hostels is similar. It is definitely deficient in proteen, fat and vitamins. The standard growth of the children in general may very easily be ascribed to this. Milk is not served in any hostel. Meat and fish are very sparingly included in the food. Diseases of deficiency are not only seen amongst the boarders but day scholars particularly in rural areas are common victims to these ailments due to the very low standard of food they are to depend on. It is hoped that the authorities concerned should take steps to improve the dietary conditions of the hostel students.

CHAPTER X

Health Propaganda

Health propaganda is considered to be the cardinal item to rouse the Health consciousness of the mass to eradicate superstitious belief from their mind. The District and Municipal Public Health staff did intensive propaganda work in rural and urban areas of the Province by short talks, lectures with or without magic lanterns. 554 talks, 3,984 lectures without magic lantern, 1,254 with magic lanterns were delivered during the year under report. 20,150 pamphlets on various health subjects were prepared and distributed among the mass in various exhibitions and epidemic areas throughout the Province. Besides this, Public Health Stalls were opened in combined Cattle and Agricultural Shows and Village Welfare Melas held in various districts of the Province to educate the mass in simple principles of Health.

A Provincial Nutrition and Health Exhibition was organised with the help of an influential local committee at Cuttack under the initiation of this Department. The Public Health staff worked in full co-operation and collaboration with the local Exhibition Committee. Twenty-five stalls on various aspects of nutrition 158

stalls on Hygiene and Epidemics were opened in the Exhibition besides the stalls opened by various other Departments of Government and private parties. This Exhibition was conducted with great success. His Excellency Sir Chandulal Trivedi, K.C.I.E., C.I.E., I.C.S., the then Governor of Orissa, opened the Exhibition. Lectures on various Public Health subjects were delivered by the Public Health experts of the Department during the period of Exhibition. A Baby Show was also conducted and prizes were distributed to the deserving healthy babies. One Health drama was staged by the Public Health Staff during the time of Exhibition which was highly appreciated by the visitors. It is hoped that more work can be achieved in future as soon as the Department is equipped with more propaganda materials.

CHAPTER XI

Public Health Administration

The Director of Health and Inspector-General of Prisons, Orissa, was the administrative head of the Public Health Department and was assisted by two Assistant Directors of Public Health, one for North and the other for South Orissa districts, in various matters of Public Health activities.

Other staff of various categories as detailed below were also maintained for the purpose of Public Health activities in the Province :

- (1) Provincial Leprosy and Health Publicity Officer
- (2) Bacteriologist and Pathologist to Government of Orissa
- (3) Provincial Malaria Officer
- (4) School Medical Officer
- (5) Medical Officers of Health
- (6) Assistant Medical Officers of Health
- (7) Assistant School Medical Officer
- (8) District Leprosy and Epidemic Officers
- (9) Assistant Malaria Officer
- (10) Assistant Bacteriologist, Analytical Chemists, Assistant Analytical Chemists, Laboratory Assistant, Media Maker and Sample-taker for Public Health Laboratory.
- (11) Special Health Inspectors
- (12) Health Inspectors
- (13) Vaccinators
- (14) Disinfectors
- (15) Stock Compounders
- (16) Clerical and other staff

The Public Health Services of the Local Bodies were provincialised with effect from the 1st February 1947 and the Local Bodies were required to meet other charges on account of travelling allowance, contingent expenditure and accommodation for the office of the Health staff of their respective jurisdiction under the scheme.

Besides this Health Inspectors, Vaccinators and Disinfectors were temporarily entertained to supplement the District and Municipal Health staff in controlling epidemics as and when situation warranted.

Both the Nutrition Health Inspectors were employed in carrying on field investigation work in Khondmals subdivision. Various posters and leaflets on nutritional subjects were prepared for the purpose of propaganda and distributed to the public in Agricultural Exhibitions and Village Welfare Melas.

A statement showing the receipt and expenditure under the head "39—Public Health" for the year 1947-48 as compared to the year 1946-47 is furnished below :

Receipt		Heads of expenditure	1946-47		1947-48	
1946-47	1947-48		Budget Provision	Expenditure	Budget Provision	Expenditure
			Rs.	Rs.	Rs.	Rs.
Nil ..	Nil ..	Public Health Establishment.	1,07,420	1,19,599	3,51,415	3,28,962
		Medical Examination of scholars	31,982	7,317	86,371	5,497
		Malaria	56,050	30,827	3,407	76,386
		Other Epidemic Diseases	47,197	1,14,737	1,11,923	97,104
		Publicity Campaign ..	26,967	26,982	22,769	31,759
		Bacteriological Laboratory	27,524	23,287	27,249	19,893
		Grant to Local Bodies for Public Health purposes ..	4,08,055	80,303	38,003	53,029
		Contribution to Pasteur Institute for vaccine ..	2,100	1,936	3,000	3,675
		Diet Survey	2,856	2,942	3,263	8,654

CHAPTER XII

Vaccination

There was licensing system of appointing vaccinators in the districts of North Orissa. As a result of provincialising the health services of Local Bodies, the licensing system was abolished and the services of the vaccinators employed under District Boards were provincialised. Provincialising the services of the vaccinators employed under various municipalities of this Province is under consideration of Government.

During times of epidemic temporary vaccinators were recruited to supplement the District and Municipal vaccinating staff as and when necessary.

There was one special Health Inspector to assist the Assistant Director of Public Health in inspecting the vaccination work. The result of the vaccination during the year under report was satisfactory.

As no arrangement for manufacture of vaccine lymph does exist in this Province, the same was obtained from the Vaccine Institute of the Government of Bihar at Namkum (Ranchi) at a cost of Rs. 25,955 and was distributed free of charge to the District Health Officers, Health Inspectors, Vaccinators and various Jai Superintendents of the Province during the year under report.

A statement showing the quantity of vaccine lymph purchased and distributed to various institutions is detailed below :

Institutions	Doses
Districts	
Municipalities	
Jails	

Vaccination operations performed—Vaccinations were performed with both the rotary and bleeding lancets. 722,024 vaccination operations were performed, of which, 1,71,441 primary and 5,50,583 re-vaccinations against 11,26,966, viz., 2,13,414 primary and 9,13,552 re-vaccinations during previous year. 95.46 primary and 53.21 re-vaccinations were successful against 96.29 primary and 58.43 re-vaccination during the year 1946.

As the people are very reluctant to get themselves and their family members vaccinated they were persuaded to take vaccination. During epidemic when advocating fails to secure the protection of people against smallpox, temporary regulations under Indian Epidemic Diseases Act, 1897, were promulgated making vaccination compulsory. Such temporary regulations were promulgated for the district of Sambalpur and remained in force for one year with effect from the 17th September 1947. Primary vaccination is compulsory in all the Municipal towns of North Orissa and in the districts of Cuttack, Puri and Balasore. Both primary and re-vaccination are compulsory in towns and rural areas of Ganjam plains and in Union Board areas of Koraput district. Although primary vaccination is compulsory in Municipal towns all the provisions of the Act could not be enforced rigidly and as a result some of the children could not be primarily vaccinated unless they cross the first year of their life. It is hoped that the Municipal authorities concerned should take such action as may be necessary to protect the child population below 1 year against smallpox in their respective jurisdiction.

CHAPTER XIII

Other Public Health Services

Public Health Laboratory—The Bacteriologist and Pathologist to the Government of Orissa was in charge of the Provincial Bacteriological and Pathological Laboratory during the year under review. He was also the Public Analyst to Government and in charge of Blood Transfusion Department of the Province.

Public Health Section—10,356 samples were examined in the Laboratory during the year under review against 10,187 samples during the previous years. 298 water samples—154 chemically and 144 bacteriologically were examined against 305 samples during the previous year. Out of 696 samples of food-stuffs received in the Laboratory 363 samples were found genuine and 308 cases adulterated, percentage of adulterated food-stuff being 45.9. In 25 cases no opinion could be given due to inadequate quantity of samples received or breakage of containers in transit.

Bacteriological Section—9,362 specimens were examined during the year under report against 3,906 specimens examined during the previous year. All sorts of chemical examinations, Biochemical tests, Diagnosis of tissue section, Bacteriological culture and preparation of autogeneous vaccines were regularly undertaken as in previous year.

Blood Transfusion Section—

Blood collection	28
Blood transfusion	..	..	..	..	..	24
Bleedings, blood grouping and matching etc.	..	..	..	..	..	236

Port Health Administration—There are three minor Ports, namely, Gopalpur in Ganjam district, Puri and Chandbali in Balasore district. The local Medical Officers of Gopalpur and Chandbali were in charge of Port Health in their respective ports and the Civil Surgeon, Puri, was in charge of Puri Port. No vessel called at any of the ports of the Province during the year under report.

General sanitation of the ports were maintained satisfactory.

Anti-Malaria activities—The establishment of the Provincial Malaria Organisation with 2 control units—one at Cuttack and the other at Koraput and 1 Survey Unit at Bhubaneswar continued to function during the year under report. The efficacy of Paludrine as an anti-malaria drug was tried at Indupur and its surrounding villages in the subdivision of Kendrapara of the Cuttack district. The Health staff consisting of one Sub-Assistant Surgeon, one Laboratory Assistant, one Insect Collector, 1 peon and 1 sweeper were engaged in this operation. The scheme was carried out efficiently and the distribution of drug to each deserving was ensured, by maintaining registers. The results achieved were very much encouraging. During the year under report Government sanctioned the scheme of D. D. T. spray in Kendrapara Municipality as an anti-malaria measure at the estimated cost of Rs. 8,000. The operation was conducted under the special supervision of the staff from the Provincial Malaria organisation and the result was satisfactory,

Laboratory investigation work in general could not be carried out efficiently due to want of suitable accommodation for the Laboratory. The Provincial Malaria building the construction of which is nearly completed will no doubt serve the purpose of accommodation to the full extent.

The Malaria Survey unit carried its survey work within the proposed New Capital area at Bhubaneswar and in near about villages to find out the intensity of the incidence of malaria in the area. Mosquito collections, indentifications and dissections and larval survey were carried out extensively. The results are summarised below :—

Spleen rate—493 children of different villages were examined and the spleen rate was found to vary from 4.7 to 30 per cent.

Parasite rate—334 blood slides were examined. 16 were found positive. The rate varies from 2 to 15 per cent and the Gamalocyte rate varied from 0 to 4.8 per cent.

Mosquito catches and dissection—38,627 Anophelene mosquitoes were caught and 12,124 were dissected to find out vector but no vector could be detected.

Larval Survey—All breeding places were surveyed. The different species of a larval were determined and recorded. It was seen that the most common Anophelene breeder is the annularis but none of them could be found out as carrier. It appeared from the figures of dispensary that the seasonal intensity ranges from September to March. There was no epidemic of malaria during the year under review.

Malaria Control Unit, Cuttack—This unit was entirely engaged in anti-mosquito work in the town of Cuttack. Intensive anti-larval measure were carried throughout the town. Clearance and training of drains were simultaneously carried out. Household cards were issued to influential men of every *mahalla* to assist and co-operate the staff of the unit. In order to get the water sources deweeded 520 notices were served out of which 386 notices were complied with and 48 cases were prosecuted.

Malaria Control Unit, Koraput—The Malaria Control Unit of Koraput was split up into three sections and was posted to Anti-Malaria Centres of Koraput, Jeypore and Pottangi. The Sub-Assistant Surgeon in charge of the unit remained in charge of the entire anti-malaria operation of the district. The strength of coolies of the operation was increased and repairing, relaying, filling and turfing of various *nallas* were completed before the commencement of rainy season. During the year under review the unit carried out trimming, canalizing and sluicing of various *nallas* and *geddas*. Clearing of the margins of tanks and ponds was also carried out at Koraput and Jeypore. As an anti-adult measure D. D. T. Emulsion were sprayed. Percentage of Malaria cases to the total number of patients treated in local hospitals are furnished below :

1943	1944	1945	1946
22.34	21.64	17.07	6.73

B. N. HAZRA, Lt.-Col.

Director of Health and Inspector-General
of Prisons, Orissa

APPENDIX I

ACTIVITIES OF PUBLIC HEALTH ENGINEERING DIVISION DURING 1947

Since the creation of the Public Health Division on the 1st April 1946 it has been called on to prepare plans and estimates for all the new buildings now under construction by P. W. D. Its activities have been extended from one end of the Province to the other and has justified its existence by satisfying the call made on it by the several Departments of Government. As the long contemplated creation of the II—Public Health Division at Berhampur has not yet materialised the brunt of the work has fallen on this Division and there has been some unavoidable delay in submission of estimates in cases of some proposals because all the Overseers except 2 were raw or fresh to the Department and the 2 Assistant Engineers sanctioned for the Division are not appointed.

The staff sanctioned has remained the same throughout this period the only change having that Mr. G. Gupta, Assistant Engineer in charge of the Berhampur Subdivision, was transferred as Executive Engineer, Roads Division, Orissa.

Preparation of Estimates for sanction—Twenty-one estimates were prepared and sanctioned under both original work and repairs during the year under report. Thirty-five Agreements were drawn up and accepted. Thirty-seven original works were in progress during the year under review. Apart from the above forecast estimates for Cuttack Water-supply and Drainage Scheme had been sanctioned. Similar estimate for the water-supply at the New Capital Area at Bhubaneswar was also prepared and investigated.

Execution works—The following details about funds finally asked for or allotted under different heads of expenditure will explain the volume of work executed by this department.

39—Public Health Original					Allotment for 1947-48 authorised expenditure	Expenditure to end of 1947
					*Rs.	Rs.
Major	..	..	..	..	71,579	38,336
Minor	..	..	..	..	20,000	19,665
Repairs	..	..	..	..	54,000	59,502
Deptt. charges	..	..	..	..	..	26,124
50—Civil Works in Aid of Cuttack Town improvement	..	..	..	..	..	3,95,740
Deposit work	..	..	..	..	8,035	13,946

The water-supply for Rayaghada town and Parlakimeadi town work also investigated and preliminary report made ready calling for further investigation, survey work, etc., could not be taken up due to short of hands.

In view of the fact that a second revision for the Public Health Circle was proposed to be sanctioned no recruitment was made in first Division.

APPENDIX II

ANNUAL REPORT OF THE EXECUTIVE COMMITTEE OF THE ORISSA PROVINCIAL BRANCH OF THE BRITISH EMPIRE LEPROSY RELIEF ASSOCIATION FOR THE YEAR 1947-48

The Orissa Branch of the British Empire Leprosy Relief Association just completed the 12th year of its existence and the campaign against Leprosy progressed steadily but slowly in spite of various handicaps arising from men, money and the abnormal times.

The anti-leprosy work carried out during the year under review mainly consisted of three-fold measures, such as treatment, propaganda and isolation. The survey aspect of the scheme was practically given no importance. The activities of the Association in these aspects during the year under review are enumerated below in detail.

Survey—In course of the surveys conducted during the last 13 years 21,880 cases have been detected. It was, therefore, considered more necessary to make arrangements for their treatment and isolation, rather than to spend money in the detection of further cases. With this end in view the survey aspect of the scheme has been relegated to the background. But sample surveys and resurveys are conducted in special areas as and when required under special circumstances.

As a result of the survey made in different parts of the districts, 219 villages having a total population of 0.75 lakhs were visited and 282 new cases amongst 0.229 lakhs actually examined were detected. These figures indicate an incidence of 1.2 per cent. Besides, the District Leprosy and Epidemic Officers visited 13 schools and detected 3 cases amongst 497 students actually examined and this shows an incidence of 0.6 per cent in the schools visited.

The survey so far made has revealed an existence of 21,880 cases of leprosy out of whom 7,091 cases are in the infective stage, presenting an incidence of 0.42 per cent on the actual population examined. Calculating on the above data, it is believed, there are as many as 99,870 leprosy cases in the Province out of whom 32,718 might be of infectious type.

At the inception of the anti-leprosy scheme in the Province, survey was considered to be of primary importance in order to assess the incidence and distribution of leprosy in different districts and the staff, employed, were engaged full time for the purpose. Later, when the result and the percentage of incidence were brought to light, greater attention had necessarily to be paid for the preventive and curative aspects of the disease. During this brief period of twelve years, the volume and scope of work has considerably increased and the attention of the entire staff has to be diverted for treatment, isolation and propaganda; and consequently the existing staff have very little time to undertake survey in such areas where no work has yet been done. Leprosy Assistants working under the Association have been put in charge of two to three leprosy clinics, under their management and in that they find hardly any time to devote themselves in doing actual survey in other areas. The present financial resources of the Association is very much limited to add to the number of Leprosy Assistants and hence although survey and re-survey in certain parts of the Province are necessary, it cannot be undertaken with the present financial condition of the Association.

Propaganda—This aspect of the scheme which is considered to be of paramount importance to educate the general public in all aspects of the disease such as its cause, transmission, treatment, isolation, etc., could not be done in proportion to its need. The District Leprosy staff, however, during their tours distributed pamphlets on various aspects of disease, delivered lectures, with and without magic lanterns and explained to the people the need for the treatment and isolation of the leprosy cases. 3,780 pamphlets were distributed and 676 lectures were delivered. Leprosy stalls were opened in Health Exhibitions held at Killa Maidan and at Puri and also in District Cattle and Agriculture Shows; and the visitors were appraised of the existing leprosy problem of the Province. On the whole, publicity was carried on in the Province during the year under report consistent with the funds available for the purpose. But the activities could have been carried out with advantage and on a more extensive scale, if better facilities in respect of equipments and other materials could be had. The Association due to limited funds could not secure varieties of models, leaflets and pamphlets, posters, cinema films and other modern type of equipments for intensive propaganda and the few it could secure on loan from other departments were too insufficient for the purpose. The utility of intensive propaganda cannot be over-emphasised and hence more funds may be made available for the purpose. It is only with intensive and sustained health propaganda that the stigma and misapprehensions attached to the disease can be dispelled.

Treatment—Although treatment has a limited value in the prevention of leprosy yet adequate attention has been paid to this aspect. The total number of leprosy clinics was 184 during the year as against 188 up to the end of the previous year, out of which 45 clinics are entirely managed by the Provincial Leprosy Relief Association. It was not possible to increase the number of rural clinics owing to the lack of interest and co-operation on the part of the people. The leprosy clinic sheds which have already been constructed swallowed a considerable amount from the funds of the Association towards their repairs and overhaul, the public financial support in this connection being particularly nil. The Association, therefore, considered it necessary to first look to the existence of the clinics already opened by them, rather than to multiply the number without making any provision for their maintenance, etc. A list of rural leprosy clinics managed by the Provincial Leprosy Relief Association in each district is given below :—

(1) Cuttack	..	Cuttack Leper Asylum, Chitalo, Gramonandipur, Derabishi, Banua, Balia, Kalakala, Sujanpur, Karanja.
(2) Puri ..	..	Janla, Tapang, Delang, Haladia, Ghoradia, Katini, Kaipadar
(3) Ganjam	..	Padmapur, Bhabanda, Ballipadaro, Bishunchakra, Pankalapadi, Sahapur Lathi, Parlakhemedi, Berhampur Sadr.
(4) Koraput	..	Jaganathpur, Kudundi, Borigam, Churahandi, Bamini, Maliguda Chakunda, Vasuda, Matuphibogram and Chakrala.
(5) Sambalpur	..	Bheran, Bijepur, Junani, Bargarh, Sambalpur Sadr.
(6) Balasore	..	Khantapara, Haladipada, Sabarang, Bampada and Rupsa.

There was a fall in the total number of cases taking regular treatment during the year under report. The total number of cases under regular treatment in all the clinics was 5,244 as against 5,970 during the previous year. The fall in attendance is mainly due to the lack of interest on the part of the medical officers in charge of hospital and dispensary clinics for leprosy work. Treatment of patients in the clinics attached to the hospitals and dispensaries has been greatly neglected by the staff; as such the patients are indirectly discouraged to attend the clinics for treatment. Secondly the low economic condition of people is also responsible for the fall in attendance inasmuch as, the great majority of patients are wage earners, and hence their attendance in the clinics become irregular as they mind more for their daily bread, than their treatment, which obviously takes long time and makes them lose their patience. There would be undoubtedly some improvement if medical officers and staff of dispensaries and hospitals would take keener interest in the patients and their treatment and would contact the patients through others in the villages visited by them. With tact and kindness they can enthruse patients to attend the clinics regularly for treatment. The Sadr Leprosy Clinic, Sambalpur, has since been taken over by the Association under its entire management.

Isolation—Isolation of infective cases plays an important roll in the control of leprosy. The separation of the infective patient from the children is in fact the crux, on which the success of the preventive campaign depends. Attention has, therefore, been paid in this direction consistent with the financial ability of the Association. The number of group isolation centres remains the same as in the previous year and no new

group isolation centre could be opened, with a view to increase the accommodation and facilities in the existing small colonies. The number of patients now segregated in the different centres maintained by the Association are detailed below :

S. No.	District	Name	Accommodation
1.	Ganjam	Lati	20
2.	Ganjam	Parlakiemedi	16
3.	Sambalpur	Junani	30
	Sambalpur	Bargarh	10
4.	Puri	Trivedi Model Leper Coly.	
		Janla	10
5.	Cuttack	Kalakala	19
6.	Balasore	Lewis Colony	20
Total			125

There has already been a proposal to increase the accommodation in the Janla Leper Colony from 10 to 50 and the building for the patients and the hospital wards, etc., are under construction. It could not be completed during this year on account of the fact that materials for the buildings could not be made available, and also Government orders sanctioning additional grants for the completion of the buildings programme could not be received. It is expected that the construction of these buildings will be completed during 1949-50.

Consequent on the construction of Hirakud Dam, the Junani Leper Colony in the district of Sambalpur will be submerged and hence proposals have been made to shift this colony to a suitable place. After the land is made available, the colony will be established on agricultural basis in the new site and the accommodation will be automatically increased.

The Bargarh Leper Colony which was upto now under the management of the local committee has been taken over into the books of the Provincial Leprosy Relief Association, and the entire expenditure such as food, clothing and treatment of patients are met from the funds of the Association. The proposal, for increasing accommodation of this colony, is under the consideration of the Executive Committee. The cost of isolation of infective patients has increased considerably owing to the present abnormal times and hence the problem of segregating the huge number of patients existing in Orissa is next to impossibility. Proposals have been, therefore, submitted to Government for the establishment of occupational colonies and night segregation centres as a more economical and equally efficient method of isolation of infective patients. Government orders are awaited.

Leper training—A course of training in leprosy was imparted to candidates at the Cuttack Leper Asylum for appointment to the posts of Leprosy Assistants. The candidates were paid a stipend of Rs. 15 per month each during the period of training which lasted for 3 months. No doctor or doctors were trained in leprosy under the auspices of the Association during the year under report.

District Leprosy Councils—District Leprosy Councils were organised in every district with a view that they will augment the activities of the Provincial Leprosy Relief Association in every possible way ; but it is a matter of regret that most of them have failed during recent years to do any useful work. The presidents are reluctant to raise funds in the altered circumstances that have resulted and thus the Councils are unable to supplement the efforts made by Provincial Association. Far from supporting the Provincial Leprosy Relief Association in financial matters, these District Leprosy Councils fully depend on the Provincial Association for the maintenance of the leper colonies and clinics and even to meet the routine contingent expenditure of the colonies already established in their districts. These Councils have been instructed to reorganise them on the lines approved by the Provincial Association.

Executive Committee—On the transfer of Lt.-Col. A. N. Chopra, O. B. E., I. M. S., Director of Health and Inspector-General of Prisons, to Assam, Major P. L. O'Neill continued to be the *ex-officio* Chairman of the Executive Committee from the 7th June 1947 to the 19th August 1947, Lt.-Col. B. N. Hajra, M. Sc., M. B. (Cal.), M. R. C. F. (Lond.), Director of Health and Inspector-General of Prisons, Orissa, continued to be the Chairman of the Executive Committee for the remaining period of the year. The Executive Committee met three times during the calendar year 1947 to discuss and dispose of important business of the Association.

Finance—Regarding the receipt side in addition to the usual grant of Rs. 17,000 from Government, the Association received an amount of Rs. 18,000 from the King George V Memorial Fund for expending over a special purpose of anti-leprosy work in the Province. The British Empire Leprosy Relief Association (Indian Council) also paid an amount of Rs. 1,137-8-0 during the year.

The Association had an income and an expenditure of Rs. 37,356-15-0 and Rs. 33,873-3-3 respectively and it has an unspent balance of Rs. 36,139-14-4 as on the 1st April 1948 in the current account of the Imperial Bank.

The Provincial Government have been pleased to provincialise the entire staff of the Association and have enhanced their annual contribution from Rs. 17,000 to Rs. 27,000.

General—The fundamental requirement for a successful campaign against leprosy is provision of adequate funds. Public co-operation is also an essential requisite without which no satisfactory progress can be made. The necessity of enthusing voluntary organisation and social workers cannot, therefore, be ignored.

Isolation of infective patients so as to keep them away from healthy children is the sheet anchor of the preventive campaign. The crux of prevention is, therefore, that children being very susceptible to get the infection, if kept in prolonged contact with infective patients, should necessarily be away from the contact of infective patients. We can, therefore, achieve the desired end if children can be protected from infection. Adults very rarely get the infection and it is very unlikely that accidental contacts with patients will ever spread the disease. Hence wholesale isolation is not warranted. Construction and maintenance of institutes of isolation of classes of patients are costly and impracticable and hence such institutional isolation is not suitable for this Province where there are huge number of infective patients. Isolation in occupational settlements or Night Segregation centres is the economical and suitable methods for solving the rural leprosy problem. Minimum isolation aimed at by Night Segregation will give the patients the freedom and liberty to move about and attend to their normal pursuits of life while, at the same time, keeps them out of contact with healthy children and consequently this method is the most economical, equally efficient and suitable for the Province. If, therefore, funds are made available for the purpose, much headway can be made in the control of the disease.

The Executive Committee and the Association is indebted to His Excellency, the President of the Association, for the inspiration and guidance so kindly given.

Anti-Leprosy Work by other agencies—Besides the anti-leprosy work, done by the Provincial Leprosy Relief Association, there are other voluntary and non-official organisations which carry on this work either on getting financial assistance from the Provincial Government or by raising funds by themselves. The details of work done by these agencies are enumerated below in brief, as they are worth mentioning to give a complete picture of the Anti-Leprosy Campaign carried on in this Province.

Mission to Lepers—The Leper Asylum at Cuttack which is the biggest of its kind in the Province was established by the Mission to Lepers sometime in 1919 at a capital cost of Rs. 1,50,000. The buildings were constructed and are maintained by the Public Works Department and the Provincial Government contributed the capitation grant of Rs. 7-8-0 per head per month for 375 beds which is the Scheduled strength of the Asylum.

The remaining expenditure, involved in the Asylum, is met from the funds of the management.

There were 399 patients in the Asylum and there was an income and expenditure of Rs. 49,188-10-4 and Rs. 50,055-12-9½ respectively during the year under report.

Hatigarh Leper Settlement—The Leper Settlement at Hatigarh in the district of Balasore is one of its kind in this Province. It is a village full of leper patients who lead homely lives. They eke out their livelihood by their own labour while the cost of their treatment is provided by the Mission to Lepers. The Provincial Government gave annual grant of Rs. 400 to this colony.

Seragation of infective lepers on the lines of Hatigarh Settlement is less costly. A proposal to establish such occupational settlements is under the consideration of Government.

Voluntary Organisations

Puri Leper Colony Committee—The Leper Colony at Puri is managed by the Committee. Government have lent the services of a Sub-Assistant Surgeon and they also give a capitation grant at Rs. 7-8-0 per head per month for 71 patients. The scheduled strength and accommodation available in the colony is 71. This committee raise funds in way of grants from the Puri Municipality, District Board, Puri and other private sources.

Servants of India Society—The Leper Clinic at Chowdwar in the district of Cuttack is managed by this Society. Government gave an annual contribution of Rs. 200 to this clinic. The other expenses are met from the funds of the Society.

Expenditure incurred by Provincial Government

	Rs.
1. Expenditure on Provincial Staff	27,725
2. Capitation grant to Cuttack Leper Asylum and Puri Leper Colony ..	40,260
3. Contribution to—	
(1) Provincial Leprosy Relief Association	17,000
(2) District Boards	2,300
(3) Other private organisations—	
(a) Hatigarh	400
(b) Chowdwar	200
Total ..	88,885

In order to have greater co-ordination in anti-leprosy work in the Province, the Executive Committee has suggested to Government that all expenditure, made by Government in this connection, should be done through the Provincial Leprosy Relief Association and their orders are awaited.

B. MISRO, M. B., B. S.

Lt.-Col. B. N. HAJRA, M. Sc., M. B. (Cal.), M. R. C. P.
(Lond.)

Honorary Secretary and Treasurer

Chairman, Executive Committee

APPENDIX III

ANNUAL REPORT OF THE ST. JOHN AMBULANCE BRIGADE OF DISTRICT NO. XIX (ORISSA)
FOR THE YEAR 1947

The year opened with a total of 28 divisions—14 Ambulance, 6 Nursing, 4 Cadet Ambulance and 4 Cadet Nursing Divisions.

Courses in First-Aid were arranged in all the Subdivisional Headquarters and other important stations in the Province with a view to form new Ambulance or Cadet Ambulance Divisions at such stations. In fact, a large number of personnel was trained. From among the trained personnel a new Ambulance Division was formed at Kendrapara and further Divisions were in the process of formation.

All the Divisions (except the Cuttack Ladies' Nursing Division, the Baptist Mission Girls' School Nursing Division, the Stewart European School Cadet Ambulance and Cadet Nursing Divisions) were active, performed practice performances, underwent refresher course and discharged other obligatory functions required of them.

The Cuttack Ambulance Division, Nos. 1 and 2, the Puri Police Ambulance and the Jail Ambulance Divisions performed public duty in connection with car festivals at Puri. The members on duty controlled crowd in conjunction with the police, rendered first aid to the sick and injured and supplied drinking water to the thirsty. An interesting event that occurred was that an old man aged about 65 sustained compound fracture of his hand in the uncontrollable rush in front of one of the cars. The members who were ever vigilant, noticed the incidence and rushed to the scene. After rendering necessary first aid they removed the injured person to the district headquarters hospital.

The members of the Cuttack Ambulance Division, No. 1 also attended the Bali Jatra at Cuttack on the Kartik Purnima day and performed duty there. Their main duty was to maintain sanitation in the Mela area and to discourage people from taking unwholesome food and drink. A large number of members, both cadets and adults, volunteered for duty in the refugee camps at Kurukhetra and in this Province. Unfortunately the adult members being Government servants could not be spared by their departmental authorities to go outside the Province and the cadets were not permitted to undertake a long journey for the purpose. The question of utilising the services of the volunteers in the refugee camps in the Province has not yet arisen.

A number of changes took place in the District personnel. His Excellency Dr. K. N. Katju, M. A., LL. D. took charge of the Presidentship of the district from His Excellency Sir Chandulal Trivedi, K. C. S. I., C. I. E. O. B. E., I. C. S., with effect from the 15th August 1947. Lieut.-Col. A. N. Chopra, O. B. E., I. M. S., consequent on his transfer to Assam made over charge of the office of the Assistant Commissioner of the District to Lieut.-Col. P. L. O'Neill, I. M. S., on the 7th June 1947, who remained in charge of the District till the 20th August 1947. Since then I am in charge of the district. Dr. (Miss) S. Mathew, W. M. S., was appointed as Lady District Superintendent but the post of the District Surgeon remained vacant.

The District remains grateful to the General Headquarters for the grant of Rs. 1,000 given for equipment of the Divisions during the year and to the Provincial Centre of the St. John Ambulance Association for the grant of Rs. 500 given for meeting the administrative expenditure etc., of the district and Rs. 399 for books and charts for opening classes at 19 centres in this province. I strongly feel that the District now stands in need of substantial help to cope with the new field of activities created for it by the amalgamation of No. XX (Eastern States) District.

ANNUAL FORM No. I— *Births registered in the*

1	2	3			4		
No.	District	Population for which returns were received (Mid year)			Number of births registered		
		Male	Female	Total	Male	Female	Total
1	Cuttack	1,121,039	1,200,794	2,321,833	32,519	30,440	62,959
2	Balasore	526,787	527,729	1,054,016	14,747	13,424	28,171
3	Puri	551,305	592,934	1,144,239	16,265	15,551	31,816
4	Sambalpur	617,966	638,763	1,256,729	17,600	16,680	34,280
5	Angul	90,239	91,719	181,958	3,016	2,943	5,964
6	Khondmals	44,067	45,562	89,629	1,228	1,163	2,391
7	Ganjam Plains	672,665	785,206	1,457,871	22,508	21,405	43,913
AGENCY DISTRICTS							
8	Ganjam	176,022	181,682	357,704	677	622	1,299
9	Koraput	25,604	24,904	50,508	430	416	846
Total of Agency districts ..		211,626	206,586	408,212	1,107	1,038	2,145
Total for the Province ...		3,825,194	4,089,293	7,914,487	108,990	102,649	211,639

DIX I
districts of Orissa Province during the year 1947

5			6			No.
Ratio of births 1,000 of estimated mid year population.			Mean ratio of births per 1,000 during previous five years.			
Male	Female	Total	Male	Female	Total	
14.01	13.11	27.12	15.46	14.41	29.87	
13.99	12.74	26.73	14.87	13.93	28.80	
14.21	13.59	27.80	14.85	13.86	28.70	
14.01	13.27	27.28	16.21	14.35	29.56	
16.58	16.20	32.78	18.29	17.28	35.55	
13.70	12.98	26.68	16.37	15.58	31.95	
15.44	14.68	30.12	15.34	14.29	29.64	
1.89	1.74	3.63	2.98	2.67	5.9	
8.51	8.24	16.75	8.71	7.83	16.54	
2.71	2.54	5.25	3.66	3.28	6.95	
13.77	12.97	26.74	14.72	13.75	28.47	

ANNUAL FORM No. I-A—Births registered according to class in each town

1		2			3		
Registering circle		Christians			Hindus		
		Male	Female	Total	Male	Female	Total
CUTTACK							
Cuttack town	...	14	16	30	902	800	1,702
Kendrapara town	...	...	...	...	104	99	203
Jajpur town	...	...	...	...	50	42	92
Total of towns	...	14	16	30	1,056	941	1,997
Total of rural	...	...	2	2	30,756	28,910	59,666
Total of district	...	14	18	32	31,812	29,851	61,663
BALASORE							
Balasore town	...	2	..	2	58	58	116
Total of rural	...	10	4	14	14,012	12,785	26,797
Total of district	...	12	4	16	14,070	12,843	2,913
PURI							
Puri town	...	1	..	1	699	633	1,332
Total of rural	...	6	9	15	15,329	14,685	30,014
Total of district	...	7	9	16	16,028	15,318	31,346
SAMBALPUR							
Sambalpur town	...	..	...	...	84	76	160
Total of rural	...	1	..	1	17,508	16,604	34,112
Total of district	...	1	..	1	17,592	16,680	34,272
ANGUL							
Total of rural	...	...	..	..	3,014	2,948	5,962
Total of district	...	..	..	..	3,014	2,948	5,962
KHONDMAIS							
Total of rural	...	..	..	..	698	630	1,328
Total of district	...	..	..	..	698	630	1,328
GANJAM PLAINS							
Berhampur town	...	20	12	32	1,030	946	1,976
Parlakimedi town	...	1	2	3	331	229	610
Total of towns	...	21	14	35	1,361	1,225	2,586
Total of rural	...	36	26	62	20,943	20,004	40,947
Total of district	...	57	40	97	22,304	21,229	43,533
AGENCY DISTRICTS							
Ganjam	...	..	..	..	677	622	1,299
Koraput	...	18	11	29	999	989	788
Total of Agency districts	...	18	11	29	1,076	1,011	2,087
Total for the Province	Towns	38	30	68	3,258	2,933	6,191
	Rural	71	52	123	1,03,336	97,577	200,913
	Districts	109	82	191	1,06,594	1,00,510	207,104

DIX I—con'd.

and rural areas in the districts of Orissa Province during the year 1947

4			5			6			7		
Muhammadans			Buddhists			Other classes			Total		
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
187	131	318	...	...	...	...	...	...	1,103	947	2,050
31	44	75	...	...	...	..	..	..	135	143	278
8	7	15	...	...	...	...	...	...	58	49	107
226	182	408	...	...	..	...	..	..	1,296	1,139	2,435
467	389	856	...	...	...	..	...	..	31,223	29,301	60,524
693	571	1,264	...	...	...	..	..	..	32,519	30,410	62,959
14	15	29	...	..	...	...	...	...	74	73	147
436	360	796	..	...	..	215	202	417	14,673	13,351	28,024
450	375	825	..	...	..	215	202	417	14,747	13,424	28,171
4	6	10	...	...	...	...	...	...	704	639	1,343
224	211	435	...	..	..	2	7	9	15,561	14,912	30,473
228	217	445	...	..	..	2	7	9	16,265	15,551	31,816
..	...	..	...	...	...	...	...	...	84	76	160
7	..	7	...	...	...	...	...	...	17,516	16,604	34,120
7	..	7	...	...	...	...	...	...	17,600	16,680	34,280
2	...	2	...	...	...	...	...	...	3,016	2,948	5,964
2	...	2	...	...	..	...	...	...	3,016	2,948	5,964
...	...	..	...	...	...	530	533	1,063	1,223	1,163	2,391
..	...	...	...	...	...	530	533	1,063	1,228	1,163	2,391
23	17	40	...	...	...	88	79	167	1,161	1,054	2,215
2	1	3	...	...	...	4	7	11	338	289	627
26	18	43	...	...	...	92	86	178	1,499	1,343	2,842
1	..	1	...	...	...	29	32	61	1,909	20,062	41,071
26	18	44	...	...	...	121	118	239	22,508	21,405	43,913
..	...	..	...	...	...	..	..	..	677	622	1,299
11	15	26	...	...	...	2	1	3	430	416	846
11	15	26	...	...	...	2	1	3	1,107	1,038	2,145
26	221	490	...	...	...	92	86	178	3,657	3,270	6,927
1,140	97	2,127	..	..	..	778	775	1,553	105,333	99,379	204,712
1,417	1,196	2,613	..	..	..	870	861	1,733	108,990	102,649	211,639

ANNUAL FORM NO. IB—Still births registered according to class in each town

1				2			3		
Registering circle				Chirstians			Hindus		
				Male	Female	Total	Male	Female	Total
CUTTACK									
Cuttack town	...	...	...	...	...	..	3	1	4
Kendrapara town	...	...	...	...	...	..	3	2	5
Jajpur town	...	...	...	...	...	..	..	..	..
Total of towns				...	...	...	6	3	9
Total of rurals				...	...	...	2,449	2,124	4,573
Total of districts				...	...	...	2,455	2,127	4,582
BALASORE									
Balasore town	...	...	...	..	...	...	1	..	1
Total of rural				...	...	...	1,062	974	2,036
Total of districts				...	...	...	1,063	974	2,037
PURI									
Puri town	...	...	...	..	...	..	67	46	113
Total of rural				...	...	..	1,571	1,248	2,819
Total of district				...	...	..	1,638	1,294	2,932
SAMBALPUR									
Sambalpur town	...	...	...	...	...	...	..	..	..
Total of rural				...	...	...	80	71	151
Total of district				...	...	...	80	71	151
ANGUL									
Total of rural				...	...	...	45	49	94
Total of district				...	...	...	45	49	94
KHONDMALS					...				
Total of rural				...	..	..	10	16	26
Total of district				...	..	..	10	16	26
GANJAM PLAINS									
Berhampur town	...	...	...	1	..	1	17	18	35
Parlakimedi town	...	...	...	...	...	...	11	6	17
Teal of towns				1	..	1	28	24	52
Total of rural				...	..	..	300	275	575
Total of district				1	..	1	328	299	627
AGENCY DISTRICTS									
Ganjam	...	...	...	...	...	..	...	...	...
Koraput	...	...	...	...	...	..	7	3	10
Total of Agency districts				...	..	..	7	3	10
Total for the Province	{	Towns	...	1	..	1	102	73	175
		Rural	...	..	..	5,524	4,760	10,284	
		Districts	...	1	..	1	5,626	4,833	10,459

DIX I—contd.

and rural areas in the districts of Orissa Province during the year

4			5			6			7		
Muhammadans			Buddhists			Other classes			Total		
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
...	3	1	4
..	3	2	5
...
..	6	3	9
3	..	3	...	...	...	...	...	...	2,452	2,124	4,576
3	..	3	..	...	...	...	...	...	2,458	2,127	4,585
...	1	...	1
12	15	27	...	...	...	...	...	...	1,074	989	2,063
12	15	27	...	...	...	...	...	...	1,075	989	2,064
...	67	46	113
15	15	30	...	...	...	...	...	...	1,586	1,263	2,849
15	15	30	...	...	...	...	...	...	1,653	1,309	2,962
...
...	80	71	151
...	80	71	151
...	45	49	94
...	45	49	94
...	7	7	14	17	23	40
...	7	7	14	17	23	40
...	3	2	5	21	20	41
...	1	...	1	12	6	18
..	4	2	6	33	26	59
...	32	22	54	33	297	629
..	35	24	60	335	323	658
...
..	7	3	10
...	7	3	10
..	4	2	6	107	75	182
30	30	60	...	...	...	39	29	68	5,593	4,809	10,402
30	30	6	...	...	...	43	31	74	5,700	4,924	10,624

ANNUAL FORM No. II—*Statement of deaths registered*

1	2				3	4	5		
No.	Districts				Area in square miles for which returns were received.	Average mid-year population per square miles.	Number of deaths registered		
							Male	Female	Total
1	Cuttack	...	...	...	3,654	635	35,286	35,000	70,286
2	Balasore	...	...	...	2,055	513	17,111	17,827	34,938
3	Puri	...	...	...	2,492	459	16,118	15,973	32,091
4	Sambalpur	...	...	...	4,723	266	18,598	17,123	35,721
5	Angul	...	...	...	881	207	2,476	2,423	4,899
6	Khondmals	...	...	...	800	112	1,334	1,286	2,620
7	Ganjam Plains	...	...	...	8,815	440	16,035	14,592	30,627
AGENCY DISTRICTS									
8	Ganjam	...	...	...	3,022	118	699	598	1,297
9	Koraput	...	...	...	117	481	390	342	733
Total of Agency districts					4,039	1 1	1,089	941	2,030
Total for the Province					21,959	360	107,937	105,165	213,162

DIX I--contd.

in the districts of Orissa Province during the year 1947

6											7		
Death rate per 1,000 of population from—											Mean ratio of deaths per 1,000 during previous five years		
Cholera	Small-pox	Plague	Fever	Dysentery and diarrhoea	Respiratory diseases	Injuries	All other causes	All causes			Male	Female	Total
								Male	Female	Total			
0·82	0·23	...	17·15	4·16	0·54	0·34	6·99	31·43	29·15	30·25	31·39	29·57	30·70
1·46	0·05	...	23·85	0·69	0·14	0·48	6·46	32·51	33·78	38·15	31·16	31·00	31·04
1·06	0·35	...	1·32	2·87	0·72	0·80	8·91	29·24	26·94	28·04	30·67	28·41	29·51
0·06	0·31	...	17·61	1·61	1·01	0·20	7·64	30·09	26·81	28·42	26·39	23·15	24·74
0·00	0·23	...	23·02	0·27	0·08	0·40	2·91	27·44	26·42	26·92	22·89	21·37	22·12
..	..	...	26·93	0·51	0·07	0·59	1·13	30·27	28·22	29·23	28·48	25·62	27·03
0·02	0·09	...	10·01	1·05	0·77	0·04	9·03	23·84	18·58	21·01	29·88	25·37	27·44
..	0·06	...	1·78	0·22	0·18	..	1·37	3·97	3·29	3·62	5·25	4·43	4·83
..	2·16	...	6·30	1·38	0·34	0·10	4·24	15·23	13·77	14·51	13·57	11·46	12·53
..	0·32	...	2·34	0·37	0·20	0·01	1·73	5·40	4·55	4·97	6·27	5·25	5·75
0·60	0·21	...	15·73	2·10	0·60	0·26	7·32	28·23	25·72	26·93	28·82	26·97	27·56

ANNUAL FORM No. III—Deaths registered in the districts of

1	2			3	4	5	6	7	8
No.	Districts			(Mid year) Population	January	February	March	April	May
1	Cuttack district	...	{ Urban ... Rural ... Total ...	122,933 2,218,900 2,321,833	162 7,241 7,503	187 5,750 5,937	176 5,428 5,604	155 5,352 5,477	140 5,069 5,209
2	Balasore district	...	{ Urban ... Rural ... Total ...	20,393 1,033,623 1,054,016	12 3,424 3,436	13 2,677 2,690	15 2,913 2,928	15 2,611 2,616	9 2,511 2,360
3	Puri district	...	{ Urban ... Rural ... Total ...	43,235 1,100,974 1,144,209	134 2,801 2,935	114 2,507 2,621	121 2,780 2,701	110 2,409 2,519	116 2,366 3,8
4	Sambalpur d.strict	...	{ Urban ... Rural ... Total ...	18,384 1,238,345 1,256,729	11 2,720 2,731	9 2,360 2,369	5 2,668 2,673	13 2,669 2,682	9 3,014 3,023
5	Angul Subdivision	...	{ Rural ... Total ...	181,958 181,958	393 393	322 322	39 395	362 362	455 455
6	Khondmals Subdivision	...	{ Rural ... Total ...	89,629 89,629	135 135	158 158	225 225	188 188	203 208
7	Ganjam district (Plains)	...	{ Urban ... Rural ... Total ...	68,853 1,389,018 1,457,871	118 1,964 2,082	87 1,635 1,722	102 1,745 1,847	90 2,028 2,118	82 2,557 2,639
AGENCY DISTRICTS									
8	Ganjam	...	...	357,704	140	60	58	123	122
9	Koraput	...	...	50,508	46	40	54	81	89
	Total of Agency districts	...	...	408,212	186	100	112	217	211
	Total of the Province	{	Urban ...	253,828	437	410	419	383	356
			Rural ...	7,660,659	18,964	15,519	16,063	15,713	16,831
			Total ...	7,914,487	19,401	15,919	16,485	16,179	17,187
	Ratio per 1,000 of population.	{	Urban ...	...	1.72	1.61	1.65	1.51	1.40
			Rural ...	...	2.47	2.02	2.10	2.06	2.20
			Total ...	...	2.45	2.31	2.08	2.06	2.17

DIX I—*contd.*

Orissa Province during each month of the year 1947

9	10	11	12	13	14	15	16	17
June	July	August	September	October	November	December	Total of deaths registered during the year	No.
121	179	212	156	168	176	181	2,013	1
4,269	5,895	5,973	5,853	5,001	5,514	6,808	68,223	
4,390	6,074	6,185	6,009	5,169	5,690	6,889	70,236	
12	22	24	28	12	17	17	196	2
2,183	2,637	2,813	3,026	2,750	3,634	3,733	34,742	
2,195	2,659	2,837	3,054	2,762	3,651	3,750	34,938	
136	175	164	116	157	140	117	1,600	3
2,568	3,441	2,770	2,342	1,853	1,851	2,408	30,491	
2,704	3,616	2,934	2,458	2,010	1,991	2,520	32,031	
13	25	8	18	10	2	2	125	4
2,940	3,524	4,189	4,047	2,842	2,348	2,275	35,596	
2,953	3,549	4,197	4,065	2,852	2,350	2,277	35,721	
396	547	520	530	350	259	370	4,899	5
396	547	520	530	350	259	370	4,899	
219	159	283	367	279	208	191	2,620	6
219	159	283	367	279	208	191	2,620	
75	108	113	110	127	137	151	1,300	7
2,840	3,242	3,382	2,901	2,544	2,172	2,317	29,327	
2,915	3,350	3,495	3,011	2,671	2,309	2,468	30,627	
94	128	140	149	119	71	88	1,297	8
53	80	68	65	53	44	52	733	9
147	208	208	214	172	115	140	2,030	}
857	509	521	428	474	472	463	5,234	
15,562	19,653	20,138	19,280	15,791	16,101	18,287	207,928	
15,919	20,162	20,659	19,708	16,265	16,573	18,705	213,162	}
1'41	2'00	2'05	1'69	1'85	1'86	1'84	23'62	
2'02	2'56	2'63	2'52	2'06	2'10	2'38	27'14	
2'01	2'55	2'61	2'49	2'05	2'09	2'36	26'93	}

ANNUAL FORM NO. IV—Deaths registered according to age in the

1	2			Deaths under r						
No.	District			Not exceeding one month						
				Male			Famele			Total of columns 3 and 6.
				Under one week	Over one week	Total	Under one week	Over one week	Total	
				1	2	3	4	5	6		7
1	Cuttack district	Urban ..	82	32	114	61	21	82	196	
		Rural ..	1,580	1,289	2,869	1,266	1,106	2,372	5,241	
		Total ..	1,662	1,321	2,983	1,327	1,127	2,454	5,437	
2	Belasore district	Urban ..	1	1	2	10	3	13	15	
		Rural ..	921	713	1,634	742	655	1,397	3,031	
		Total ..	922	714	1,636	752	658	1,410	3,046	
3	Puri district	Urban ..	73	30	103	43	26	69	172	
		Rural ..	821	819	1,640	722	727	1,449	3,089	
		Total ..	894	849	1,743	765	753	1,518	3,261	
4	Sambalpur district	Urban ..	3	2	5	..	3	3	8	
		Rural ..	1,060	1,010	2,070	892	875	1,767	3,837	
		Total ..	1,063	1,012	2,075	882	878	1,770	3,845	
5	Angul subdivision	Rural ..	130	127	257	93	116	209	466	
		Total ..	130	127	257	93	116	209	466	
6	Khondmals subdivision	Rural ..	38	42	80	32	42	74	154	
		Total ..	38	42	80	32	42	74	154	
7	Gangam district (Plains)	Urban ..	35	24	79	34	20	54	133	
		Rural ..	1,225	789	2,014	987	733	1,720	3,734	
		Total ..	1,280	813	2,093	1,021	753	1,774	3,837	
AGENCY DISTRICTS										
8	Ganjam	.. ..	53	37	90	36	27	63	153
9	Koraput	.. ..	25	7	32	16	8	24	56
Total of Agency districts ..			78	44	122	52	35	87	209	
Total for the Province	Urban ..	214	89	303	148	73	221	524		
	Rural ..	5,853	4,833	10,686	4,786	4,289	9,075	19,761		
	Total ..	6,067	4,922	10,989	4,934	4,362	9,296	20,258		

DIX I—contd.

districts of Orissa Province during the year 1947

3

one year

Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total male columns 3, 8 and 11.	Total female columns 6, 9 and 12.	Total	No.
Male	Female	Total	Male	Female	Total				
8	9	10	11	12	13	14	15	16	
91	68	159	38	35	73	243	185	428	1
2,930	2,643	5,573	1,191	1,129	2,320	6,990	6,144	13,134	
3,021	2,711	5,732	1,229	1,164	2,393	7,238	6,329	13,562	
3	2	5	1	..	1	6	15	21	2
1,485	1,328	2,813	459	529	1,078	3,668	3,254	6,922	
1,488	1,330	2,818	550	529	1,079	3,674	3,269	6,943	
49	55	104	23	32	55	175	156	331	3
1,101	1,031	2,143	598	529	1,118	3,349	3,000	6,349	
1,160	1,086	2,246	621	552	1,173	3,524	3,156	6,680	
4	3	7	1	3	4	10	9	19	4
1,262	1,070	2,332	627	493	1,120	3,959	3,320	7,289	
1,266	1,073	2,339	628	496	1,124	3,969	3,339	7,308	
261	212	473	136	115	253	656	536	1,192	5
261	212	473	138	115	253	656	536	1,192	
125	115	240	68	84	152	273	273	546	6
125	115	240	68	84	152	273	273	546	
37	88	65	26	29	55	142	111	253	7
549	461	1,010	434	465	899	2,997	2,646	5,643	
586	489	1,075	460	494	954	3,139	2,757	5,896	
19	20	39	16	12	28	125	95	220	8
21	15	36	6	10	16	59	49	108	9
40	35	75	22	22	44	184	144	328	
184	156	340	89	99	188	576	476	1,052	
7,763	6,895	14,658	3,627	3,357	6,984	22,076	19,327	41,413	
7,947	7,057	14,998	3,716	3,456	7,172	22,652	19,803	42,455	

ANNUAL FORM No. IV—Deaths registered according to age in the

1	2			3		4		5		6	
No.	District			1 year and under 5 years		5 years and under 10 years		10 years and under 15 years		15 years and. under 20 years	
				Male	Female	Male	Female	Male	Female	Male	Females
1	2			3	4	5	6	7	8	9	10
1	Cuttack district	...	Urban ...	96	90	27	40	26	26	41	53
			Rural ...	4,250	4,070	1,540	1,395	915	895	1,242	1,367
			Total ...	4,346	4,160	1,567	1,435	951	921	1,283	1,420
2	Balasore district	...	Urban ...	3	8	1	5	8	5	6	8
			Rural ...	1,677	1,823	825	832	526	561	600	723
			Total ...	1,680	1,831	826	837	534	566	606	731
3	Puri district	...	Urban ...	64	58	17	30	19	14	18	16
			Rural ...	2,169	2,281	770	781	430	377	522	663
			Total ...	2,233	2,339	787	811	449	391	540	679
4	Sambalpur district	...	Urban ...	10	14	2	2	1	3	..	1
			Rural ...	2,829	2,557	1,089	959	659	577	654	630
			Total ...	2,839	2,571	11,000	961	660	580	654	631
5	Angul subdivision	...	Rural ...	435	395	152	161	91	78	82	89
			Total ...	435	395	152	161	91	78	82	89
6	Khondmals	..	Rural ...	211	201	85	72	58	48	58	35
			Total ...	211	201	85	72	58	48	58	35
7	Ganjam district (Plains)		Urban ...	58	47	40	27	27	13	22	29
			Rural ...	1,702	1,613	1,241	1,214	1,206	1,112	1,237	1,182
			Total ...	1,760	1,660	1,281	1,241	1,263	1,125	1,309	1,211
AGENCY DISTRICTS											
8	Ganjam	...	...	89	79	54	53	57	39	61	53
9	Koraput	...	...	72	46	28	31	21	14	20	34
	Total of Agency districts	...	...	161	125	82	84	78	53	81	87
			Urban ...	231	217	87	104	91	61	87	107
	Total for the Province...		Rural ...	13,434	13,065	5,793	5,498	3,989	3,701	4,526	4,776
			Total ...	13,665	13,282	5,880	5,602	4,080	3,762	4,613	4,883

DIX I—contd.

districts of Orissa Province during the year 1947.

7		8		9		10		11		12
20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and under 60 years.		60 years and upwards.		No.
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
11	12	13	14	15	16	17	18	19	20	21
90	88	101	92	94	69	104	70	220	245	1
3,010	3,538	3,422	3,157	2,980	2,503	3,315	3,287	6,697	7,686	
3,100	8,626	3,346	3,249	3,074	2,572	3,419	3,357	6,917	7,931	
9	12	15	17	12	9	17	6	20	14	2
1,479	1,938	1,804	1,906	1,954	1,56	2,011	2,065	2,470	2,868	
1,488	1,950	1,819	1,923	1,966	1,769	2,028	2,071	2,490	2,880	
57	63	72	55	89	62	111	82	216	226	3
1,338	1,604	1,374	1,287	1,531	1,270	1,646	1,708	2,151	2,240	
1,395	1,677	1,446	1,342	1,620	1,332	1,757	1,790	2,367	2,466	
7	2	7	4	4	4	14	11	12	8	4
1,263	1,595	1,611	1,357	1,589	1,219	1,688	1,450	3,181	3,391	
1,270	1,597	1,618	1,361	1,593	1,223	1,702	1,461	3,193	3,399	
156	175	160	151	165	113	181	229	398	496	5
156	175	160	151	165	113	181	229	398	496	
92	94	124	117	116	109	16	154	155	183	
92	94	124	117	116	109	166	154	155	183	6
70	61	77	55	107	51	71	60	117	112	
1,346	1,180	1,323	1,205	1,264	1,125	1,198	1,131	1,207	1,618	
1,416	1,241	1,400	1,260	1,331	1,176	1,272	1,191	1,824	1,730	7
49	48	66	46	56	51	51	50	91	94	
40	33	36	18	29	25	26	24	59	69	
89	81	102	64	85	76	77	74	150	153	
233	226	275	223	306	195	320	229	585	605	8
8,773	10,205	9,740	9,244	9,684	8,175	10,282	10,098	16,909	18,633	
9,006	10,431	10,015	9,467	9,990	8,370	10,602	10,327	17,494	19,238	

ANNUAL FORM NO. IV-A—Deaths under one year registered according to class in each town

1				2			3		
Registering circle				Christians			Hindus		
				Male	Female	Total	Male	Female	Total
CUTTACK									
Cuttack town	...	...	...	2	..	2	185	128	313
Kendrapara town	...	...	...	...	...	...	40	38	78
Jajpur town	...	...	...	...	..	..	2	7	9
Total of towns	...	...	...	2	..	2	227	173	400
Total of rural	...	...	...	...	..	...	6,988	6,144	13,132
Total of district	...	...	...	2	..	2	7,215	6,317	13,532
BALASORE									
Balasore town	...	...	...	...	...	...	6	15	21
Total of rural	...	...	...	...	...	...	3,525	3,115	6,640
Total of district	...	...	...	...	...	...	3,531	3,130	6,661
PURI									
Puri town	...	...	...	...	...	...	172	155	327
Total of rural	...	...	...	...	...	...	3,310	2,968	6,278
Total of district	...	...	...	...	...	...	3,482	3,123	6,605
SAMBALPUR									
Sambalpur town	...	...	...	...	...	...	10	9	19
Total of rural	...	...	...	...	...	...	3,559	3,330	7,289
Total of district	...	...	...	...	...	...	3,696	3,339	7,308
ANGUL									
Total of rural	...	...	...	...	...	...	656	536	1,192
Total of district	...	...	...	...	...	...	656	536	1,192

DIX I—contd.

and rural areas in the districts of Orissa Province during the year 1947—contd.

4			5			6			7		
Muhammadans			Buddhists			Other classes			Total		
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
14	12	26	...	...	...	...	...	...	201	140	341
..	..	..	...	...	...	...	..	...	40	38	78
...	...	...	...	...	...	...	...	...	2	7	9
14	12	26	...	...	...	...	...	...	243	185	428
2	..	2	...	...	...	...	...	...	6,990	6,144	13,134
16	12	28	...	...	...	...	...	...	7,233	6,329	13,562
...	...	...	...	...	...	...	...	...	6	15	21
143	139	282	...	...	...	..	...	...	3,668	3,254	6,922
143	139	282	...	...	...	—	...	..	3,674	3,269	6,943
3	1	4	...	...	...	...	...	...	175	156	331
39	32	71	...	...	...	...	...	...	3,349	3,000	6,349
42	33	75	...	...	...	...	...	...	3,524	3,156	6,680
...	...	...	...	...	...	...	...	...	10	9	19
...	...	...	...	...	...	...	...	...	3,559	3,330	7,289
...	..	...	...	...	...	...	...	...	3,969	3,339	7,308
...	...	...	...	...	...	...	...	...	656	536	1,192
...	...	...	...	...	...	...	...	...	656	536	1,192

DIX I—contd.

and rural areas in the districts of Orissa Province during the year 1947—contd.

4			5			6			7		
Muhammadans			Buddhists			Other classes			Total		
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
...	...	...	...	...	...	132	130	262	273	273	546
...	...	...	...	...	...	132	130	262	273	273	546
3	2	5	...	...	...	12	6	18	101	75	176
...	...	...	...	...	...	1	3	4	41	36	77
3	2	5	...	...	...	18	9	22	142	111	253
..	..	..	..	...	...	632	735	1,367	2,997	2,646	5,643
3	2	5	...	...	...	654	744	1,389	3,139	2,757	5,896
...	...	...	...	...	...	15	12	27	125	95	220
...	..	..	...	...	...	11	12	23	59	49	108
...	..	..	...	...	...	26	24	50	184	144	328
20	15	35	...	...	...	13	9	22	576	478	1,052
184	171	355	...	...	...	790	889	1,679	22,076	19,327	41,403
204	186	390	...	...	...	803	898	1,701	22,652	19,803	42,455

ANNUAL FORM No. V—Deaths registered according to class

1	2			3											
No.	Districts			Number of death											
				Christians			Hindus			Muhammadans			Buddhists		
				Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Cuttack	...	...	14	7	21	34,422	34,304	68,726	800	689	1,489	...	...	...
2	Balasore	...	...	22	28	50	16,452	17,272	33,724	741	345	786	...	...	...
3	Puri	...	...	5	3	8	15,851	15,690	31,541	261	280	541	...	...	...
4	Sambalpur	...	...	18	22	35	18,547	17,077	35,624	98	24	62	...	...	...
5	Angul	...	...	..	...	..	2,475	2,422	4,897	1	1	2	...	...	...
6	Khondmals	...	...	..	..	..	740	680	1,420	..	..	..	...	..	...
7	Ganjam Plains	...	...	27	19	46	15,897	14,479	30,376	19	13	32	...	...	...
AGENCY DISTRICTS															
	Ganjam	...	...	..	..	..	699	598	1,297	..	...	..	...	...	...
	Koraput	...	...	13	11	24	364	320	684	12	12	24	...	...	...
	Total of Agency districts	...	...	13	11	24	1,063	918	1,981	12	12	24	...	...	...
	Total for the Province	...	...	94	90	184	105,447	102,842	2,08,289	1,572	1,364	2,336	...	...	...

DIX I-contd.

in the districts of Orissa Province during the year 1947

4																	
registered			Ratio of deaths per 1,000 of population														
Other classes			Christians			Hindus			Muhammadans			Buddhists			Other classes		
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
...	...	...	10.89	4.82	7.23	32.80	30.52	31.62	22.23	17.21	19.59	...	...	...	...	..	...
196	182	378	23.65	31.75	26.57	33.89	35.42	34.66	22.58	18.11	20.37	...	...	...	9.61	9.01	9.31
1	...	1	9.49	4.64	6.82	30.87	28.40	29.59	18.63	19.46	19.05	...	...	...	0.04	...	0.04
...	...	...	4.22	7.12	5.67	43.07	38.59	40.80	13.58	9.13	11.43	...	...	...	...	...	...
...	...	...	...	...	..	31.21	30.13	30.66	8.61	4.95	4.17	...	...	...	...	...	...
594	606	1,200	..	..	..	107.65	99.53	103.60	..	..	..	...	...	...	16.00	15.66	15.83
92	81	173	21.93	14.97	18.00	25.46	19.68	22.34	9.69	7.82	8.83	...	...	...	2.04	1.73	1.88
...	...	...	...	...	..	87.81	84.56	86.28	...	...	..	...	...	...	..	..	..
1	...	1	12.61	11.97	12.31	25.70	23.80	24.77	13.82	16.48	15.04	...	...	...	0.10	..	0.05
1	..	1	6.40	5.55	5.98	48.05	44.74	46.46	11.75	15.38	13.32	...	...	...	..	..	..
884	869	1,753	10.14	9.40	9.76	32.83	29.81	31.27	20.79	17.82	19.02	...	...	...	1.67	...	1.62

APPENDIX I—contd.

ANNUAL FORM NO. V-A—Death rates according to class, urban and rural areas separately in each district of Orissa Province during the year 1947

S. No.	District		Christians	Hindus	Muhammadans	Buddhists	Other Class	Total
1	2		3	4	5	6	7	8
1	Cuttack	{ Urban ...	8.43	21.17	14.26	..	..	19.56
		{ Rural ...	3.07	32.04	20.96	..	..	30.75
2	Balasore	{ Urban ..	3.83	12.20	5.43	..	..	9.61
		{ Rural ..	37.09	35.00	22.64	..	9.49	33.61
3	Puri	{ Urban ..	7.17	37.85	4.95	..	10.42	37.98
		{ Rural ..	6.71	29.25	19.46	..	..	27.69
4	Sambalpur	{ Urban ..	..	8.32	2.11	..	..	6.80
		{ Rural ..	5.98	41.36	14.72	..	..	28.74
5	Angul	{ Urban ..	..	..	..	..	..	..
		{ Rural ..	..	30.66	4.17	..	..	26.92
6	Khondmals	{ Urban ..	..	..	..	..	..	..
		{ Rural ..	..	103.60	..	..	15.83	29.23
7	Ganjam Plains	{ Urban ..	17.16	17.54	19.58	..	87.77	18.88
		{ Rural ..	19.00	22.58	1.82	..	0.67	21.11
AGENCY DISTRICTS								
8	Ganjam	{ Urban ..	..	..	..	..	..	..
		{ Rural ..	..	68.28	..	..	..	3.62
9	Koraput	{ Urban ...	..	..	..	..	..	..
		{ Rural ..	12.31	24.77	15.04	..	0.05	14.51
Total of Agency Districts.			{ Urban ..	..	..	..	..	..
			{ Rural ..	5.98	46.46	13.32	..	4.97
Total for the Province.			{ Urban ..	8.84	21.84	11.49	20.33	20.62
			{ Rural ..	10.03	31.59	20.39	1.53	27.14

ANNUAL STATEMENTS

STATEMENT No. VI

ANNUAL FORM No. VI—Deaths registered from different causes in the

1	2	3			4			5			6	7	8	9	10	12
S. No.	District and Town.	Population for which returns were received (Mid-year)			Births			Birth rate			Cholera	Small-pox	Plague	Fever	Dysentery and Diarrhoea	Respiratory diseases
		Male	Female	Total	Male	Female	Total	Male	Female	Total						
	Districts exclu- ding towns															
1	Cuttack ..	1,064,248	1,154,652	2,218,900	21,223	29,301	60,524	14'07	13'21	27'28	1,911	546	...	39,134	9,385	1,154
2	Balasore ..	515,502	518,121	1,033,623	14,673	13,351	28,024	14'19	12'52	27'11	1,523	56	...	25,093	669	130
	Puri ..	527,333	573,641	1,100,974	15,561	14,912	30,473	14'13	13'55	27'08	1,209	397	...	14,951	383	703
4	Sambalpur ..	608,939	629,406	1,238,345	17,516	16,694	34,210	14'14	13'41	27'55	69	378	...	22,032	1,979	1,263
5	Angul ..	93,397	91,719	185,116	3,016	2,948	5,964	16'53	16'20	32'78	1	42	...	4,199	49	15
6	Khondmals ..	44,067	45,562	89,629	1,223	1,163	2,386	13'70	12'68	26'68	..	..	...	2,424	46	6
7	Ganjam Plains..	637,610	751,498	1,389,108	21,609	20,062	41,671	15'13	14'44	29'57	24	116	...	14,237	1,367	968
	AGENCY DISTRICTS															
8	Ganjam ..	176,022	181,682	357,704	677	622	1,299	1'89	1'74	3'63	..	23	...	637	80	65
9	Koraput ..	25,604	24,904	50,508	430	416	846	5'1	3'21	16'75	..	109	...	318	70	17
	Total of Agency Districts.	261,626	266,586	528,212	1,107	1,038	2,145	2'71	2'54	5'25	..	13	...	995	150	82
	Total for the Pro- vince.	3,69,564	3,971,095	7,660,659	105,333	99,319	204,712	13'75	12'97	26'72	4,737	1,667	...	123,456	16,728	4,331
	TOWNS CUTTACK DISTRICT															
1	Cuttack ...	44,902	35,103	80,010	1,103	947	2,050	13'78	11'84	25'62	..	..	..	334	217	54
2	Kendrapara ..	5,877	5,535	11,412	135	143	278	11'33	12'53	21'33	9	..	..	206	32	32
3	Jajpur ..	6,012	5,499	11,511	58	49	107	5'04	4'26	9'30	2	..	..	104	12	5
	BALASORE DISTRICT															
4	Balasore ..	10,785	9,608	20,393	74	73	147	3'63	3'53	7'1	15	..	..	49	60	20
	PURI DISTRICT															
5	Puri ..	23,972	19,293	43,265	704	639	1,343	16'27	14'77	31'04	..	..	..	259	204	129
	SAMBALPUR DISTRICT															
6	Sambalpur ..	9,017	9,317	18,334	84	76	160	4'7	4'13	8'70	9	8	..	51	18	8
	GANJAM DISTRICT															
7	Berhampur ..	24,195	23,002	47,197	1,161	1,054	2,215	24'60	22'33	46'93	..	..	..	2'8	101	103
8	Parlakemidi ..	10,860	10,796	21,656	337	29	627	15'61	13'34	8'95	..	14	..	74	57	53
	Total for Towns.	135,630	113,19	253,828	3,657	3,270	6,927	4'41	12'88	27'29	30	22	..	1,445	721	395
	Total for the Province.	3,825,194	4,089,293	7,914,487	108,490	102,649	2,11,639	13'77	12'97	26'74	4,772	1,639	..	1,24,501	17,449	4,723

DIX I—contd.

districts and towns of Orissa Province during the year 1947

12						13	14			15													
Injuries						All other causes	Total of deaths from all causes			Ratio of deaths per 1,000 of population													
Suicide		Vols or accidents	Self-bite or killed by wild animals	Falls	Total		Male	Female	Total	Cholera	Small-pox	Plague	Fever	Dysentery and diarrhoea	Respiratory diseases	Injuries	All other causes	From all causes				Mean of previous five years	No.
Male	Female																	Male	Female	Total	Male		
127	132	264	100	37	780	15,311	34,181	34,042	68,223	0.86	0.25	...	17.64	3.67	0.52	0.31	6.90	32.12	29.48	3.7	59.83	1	
76	82	155	132	42	487	6,784	17,014	17,528	34,542	1.47	0.05	...	24.28	0.65	0.12	0.7	6.56	34.60	34.21	33.61	31.2	2	
43	56	152	69	12	332	98,011	15,280	15,011	30,411	1.10	0.16	...	13.58	2.98	0.64	0.31	8.91	2.07	26.52	27.19	26.26	3	
20	12	147	61	10	150	9,570	1,531	17,065	5,996	0.05	0.30	...	17.83	0.39	1.02	0.24	7.73	30.43	27.11	28.74	24.90	4	
7	17	31	17	1	73	523	2,476	2,423	4,999	...	0.23	...	23.02	0.27	0.08	0.40	2.91	17.44	16.42	26.92	22.2	5	
3	1	11	26	2	53	101	1,334	1,586	2,620	...	...	...	26.93	0.51	0.07	0.59	1.13	30.27	28.22	29.23	27.03	6
2	10	13	11	1	37	12,578	1,530	14,076	20,327	0.1	0.08	...	10.25	0.98	0.70	0.03	9.05	24.03	18.67	21.11	27.55	7	
...	...	...	...	...	...	491	669	598	1,267	...	0.06	...	1.78	0.22	0.18	...	1.22	3.97	3.59	3.62	4.83	8
1	...	2	2	...	5	214	390	343	73	...	2.16	...	6.30	1.38	0.34	0.10	4.24	15.73	13.77	14.57	12.53	9	
1	...	2	...	...	5	706	1,089	91	2,030	...	0.32	...	2.34	0.37	0.24	0.01	0.3	5.40	4.5	4.97	5.71	...
279	370	775	48	15	2,117	55,992	105,206	102,72	207,9	0.61	0.27	...	16.06	2.18	7.16	0.26	7.23	28.51	25.87	27.14	24.57	...	
1	1	3	1	1	7	819	797	674	1,411	...	...	...	11.80	2.71	0.67	0.09	10.11	17.75	19.20	18.38	27.93	1
...	1	1	...	...	3	170	157	204	431	0.79	...	...	18.05	4.56	1.80	0.17	8.76	35.52	6.87	5.14	26.03	2
1	...	2	...	...	3	15	61	80	141	0.17	...	...	9.0	1.01	0.4	0.26	1.36	1.15	14.55	12.25	7.86	3
...	...	19	1	...	20	32	97	99	196	0.72	...	...	2.40	2.94	0.98	0.98	1.57	8.99	10.30	9.61	12.51	...
...	3	8	2	...	15	972	838	762	1,600	...	...	...	6.68	5.71	2.77	0.35	22.47	34.96	39.50	37.98	41.41	5
...	...	...	...	...	...	31	67	58	125	0.49	0.43	...	2.77	0.98	0.43	...	1.69	7.42	6.20	6.80	14.17	6
...	...	9	10	2	21	411	538	401	934	...	...	...	6.10	2.14	2.18	0.44	8.92	22.03	17.43	19.79	27.93	7
...	...	1	...	0	1	167	201	165	366	...	0.65	...	3.41	2.63	2.45	0.05	7.71	18.51	15.28	16.10	19.20	8	
4	5	43	14	3	60	2,547	2,791	2,43	5,23	0.14	0.09	...	5.69	2.84	1.36	0.27	10.03	20.58	20.67	20.62	27.17	9	
233	375	818	50	103	2,081	57,939	1,7,97	105,165	213,162	0.66	0.21	...	15.7	2.20	0.60	0.23	7.32	18.23	25.72	26.93	27.56	10	

DIX I—contd.

of fevers, dysentery, diarrhoea, respiratory diseases and other causes

Pnenmonia	Pulmonary tuberculosis	Whooping cough	Other respiratory dis- eases	Beri-beri	Acute poliomyelitis	Diphtheria	Chicken-pox	Mumps	Tuberculosis of joints	Other tubercular diseases	Leprosy	Cancer	Deaths from child-birth	Deaths under one year	Infantile mortality rate per 1,000 births
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
..	54	..	...	...	..	..	...	..	17	7	66	341	166.34
..	32	...	...	...	...	...	...	..	...	..	..	78	280.57
..	5	...	...	...	...	...	...	..	...	...	1	9	84.11
...	20	...	...	...	...	...	...	...	...	...	1	21	142.86
..	120	...	...	...	...	...	...	..	32	7	21	331	246.46
..	8	...	...	...	...	...	...	..	5	...	..	19	118.75
..	103	...	...	...	...	...	...	..	4	7	22	173	79.46
10	53	..	...	...	1	...	...	...	4	3	5	77	152.81

ANNUAL FORM No. VII—Deaths registered from cholera in the

1	2			3		4		5						
Serial No.	District			Circles of registration		Villages		January	February	March	April	May	June	July
				Number in each district.	Number from which deaths from cholera were reported	Number in each district	Number from which deaths from cholera were reported							
1	Cuttack	...	...	13	11	5,760	735	124	26	37	37	16	48	289
2	Balasore	...	...	10	10	3,426	923	9	49	50	86	130	209	193
3	Puri	...	...	6	6	2,913	402	3	6	22	43	160	95	444
4	Sambalpur	...	...	27	5	2,595	45	...	..	1	1	1	2	7
5	Angul	..	...	5	1	473	1	...	..	...	...	...	...	...
6	Khondmals	...	...	4	..	1,219	..	...	..	...	...	...	...	...
7	Ganjam plains	...	...	9	7	2,615	15	...	..	...	...	...	...	18
AGENCY DISTRICTS														
8	Ganjam	...	...	4	..	2,415	..	...	...	...	...	...	...	...
9	Koraput	...	...	7	..	8	..	...	...	...	...	...	...	...
Total of Agency districts...				11	..	2,423	..	...	...	...	...	...	...	...
Total for the Province				85	40	21,424	2,121	136	81	110	167	307	354	951

DIX I—contd.

districts of Orissa Province during each month of the year 1947

					6			7			8	1
August	September	October	November	December	Total			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years	Serial No.
					Male	Female	Total	Male	Female	Total		
371	238	138	260	338	917	1,005	1,922	0·82	0·84	0·83	2·43	1
138	132	69	188	265	733	805	1,538	1·39	1·52	1·46	2·48	2
237	109	57	22	11	559	650	1,209	1·01	1·10	1·06	2·04	3
21	30	4	4	7	45	33	78	0·07	0·05	0·06	0·91	4
...	...	1	...	...	..	1	1	..	0·01	..	0·34	5
...	...	...	...	...	..	..	..	..	..	..	0·06	6
..	6	...	...	..	15	9	74	0·02	0·01	0·02	0·01	7
...	..	...	...	...	..	..	..	..	..	..	0·07	8
...	...	...	...	...	...	...	..	..	..	..	0·57	9
...	..	...	...	..	..	..	..	..	..	..	0·11	
767	535	269	474	621	2,269	2,503	4,772	0·59	0·61	0·60	1·69	

ANNUAL FORM NO. VIII—Deaths registered from small-pox in the districts

1	2	3	4	5							
Serial No.	Districts.	Circles of registration		Villages		January	February	March	April	May	June
		Number in each district	Number from which deaths from smallpox were reported	Number in each district	Number from which deaths from smallpox were reported						
1	Cuttack ..	18	5	5,760	125	59	73	99	96	47	27
2	Balasore ..	10	4	3,426	123	4	12	13	11	7	1
3	Puri	6	3	2,913	222	35	40	29	69	52	23
4	Sambalpur ..	27	12	2,595	315	51	20	35	60	52	54
5	Angul	5	3	473	10	...	..	..	..	11	12
6	Khondmals ..	4	..	1,219	..	..	..	..	..	..	..
7	Ganjam Plains ..	9	8	2,415	174	5	3	4	10	86	22
AGENCY DISTRICTS.											
8	Ganjam ..	4	3	2,415	9	..	..	..	..	23	..
9	Koraput ..	7	5	8	6	..	1	8	43	37	13
Total of Agency districts.		11	8	2,423	15	..	1	8	43	60	13
Total for the Province		85	43	21,424	1,004	154	149	188	289	315	152

DIX I—contd.

of Orissa Province during each month of the year 1947

						6			7		8			9	1
July	August	September	October	November	December	Total			Number of deaths among children		Ratio of deaths per 1,000 of population			Mean ratio per 1,000 of previous five years	Serial No.
						Male	Female	Total	Under one year	One year and under 10 years	Male	Female	Total		
39	38	25	13	10	20	261	285	546	160	280	0·23	0·24	0·23	1·36	1
3	2	..	2	..	1	35	21	56	21	10	0·07	0·04	0·05	1·44	2
24	31	29	20	5	40	185	212	397	14	62	0·33	0·36	0·25	0·80	3
43	34	22	2	5	8	213	173	386	35	60	0·34	0·27	0·31	0·82	4
13	4	2	..	..	..	19	23	42	7	9	0·21	0·25	0·23	0·15	5
..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·13	6
..	..	..	..	..	..	60	61	120	1	8	0·10	0·08	0·09	0·22	7
	..	..	..	..	..	12	11	23	..	..	0·07	0·06	0·06	0·05	8
..	7	..	..	..	..	56	53	109	..	..	2·19	2·13	2·16	0·17	9
..	7	..	..	..	..	68	64	132	..	..	0·34	0·31	0·32	0·06	
121	116	78	37	20	69	850	839	1,689	238	357	0·22	0·20	0·21	0·89	

ANNUAL FORM No. IX—Deaths registered from fevers in the districts

1	2			3		4		5						
	Districts			Circles of registration.		Villages		January	February	March	April	May	June	July
				Number in each district	Number from which deaths from fevers were reported	Number in each district	Number from which deaths from fevers were reported							
1	Cuttack	...	...	13	13	5,760	4,875	4,437	3,456	3,204	3,120	2,840	2,369	2,817
2	Balasore	...	...	10	10	3,426	3,414	2,546	1,925	2,155	1,752	1,650	1,372	1,757
3	Puri	...	...	6	6	2,913	2,895	1,581	1,358	1,385	1,245	1,260	1,121	1,413
4	Sambalpur	...	...	27	27	2,595	2,472	1,663	1,383	1,460	1,691	1,951	1,848	2,087
5	Angul	...	...	5	5	473	362	328	264	337	318	368	321	408
6	Khondmals	...	...	4	4	1,219	1,125	120	145	212	175	201	158	144
7	Ganjam Plains	...	...	9	9	2,615	1,580	965	974	975	976	1,228	1,256	1,643
AGENCY DISTRICTS														
8	Ganjam Agency	...	...	4	4	2,415	648	62	38	36	66	52	45	63
9	Koraput Agency	...	...	7	7	8	8	20	29	27	33	27	21	34
Total of Agency districts				11	11	2,423	656	82	58	63	101	79	44	97
Total for the Province				85	85	21,424	16,879	11,722	9,564	9,791	9,378	9,577	8,612	10,426

DIX I—contd.
of Orissa Province during each month of the year 1947

					6			7			8	1
August	September	October	November	December	Total.			Ratio of deaths per 1,000 of population			Mean ratio per 1,000 of previous five years	Serial No.
					Male	Female	Total	Male	Female	Total		
3,097	3,444	3,101	3,570	4,373	19,369	20,459	39,828	17.28	17.07	17.15	14.55	1
1,906	2,120	2,182	2,864	2,872	12,173	12,969	25,142	23.13	24.57	23.85	19.18	2
1,139	1,096	984	1,146	1,512	7,476	7,764	15,240	13.56	13.09	13.32	13.33	3
2,407	2,484	1,940	1,639	1,579	1,140	10,993	22,133	18.03	17.21	17.61	13.58	4
456	466	319	219	324	2,109	2,081	4,190	23.37	22.69	23.02	17.81	5
267	356	266	199	171	1,216	1,198	2,414	27.59	62.29	26.93	24.85	6
1,626	1,471	1,218	1,047	1,120	7,640	6,959	14,599	11.35	8.86	10.01	16.15	7
64	70	27	35	47	344	293	637	1.95	1.61	1.78	3.26	8
35	32	17	22	30	168	150	318	6.56	6.02	6.30	5.56	9
99	102	74	57	77	512	443	955	2.54	2.14	2.34	3.53	
11,087	11,539	10,034	10,741	12,030	61,635	62,866	1,24,501	16.11	15.37	15.73	14.78	

ANNUAL FORM No. X—Deaths registered from dysentery and diarrhoea in the districts

1	2	3	4	5								
Serial No.	Districts	Circles of registration		Villages		January	February	March	April	May	June	July
		Number in each district.	Number from which deaths from dysentery and diarrhoea were reported.	Number in each district.	Number from which deaths from dysentery and diarrhoea were reported.							
1	Cuttack ...	13	18	5,760	3,409	881	773	746	708	797	685	1,026
2	Balasore ...	10	10	3,426	136	63	53	66	58	45	45	51
3	Puri ...	6	6	2,913	1,236	236	255	300	245	286	324	386
4	Sambalpur ...	27	25	2,595	1,380	59	49	112	19	85	112	217
5	Angul ...	5	5	473	75	1	..	1	2	6	3	12
6	Khondmals ...	4	4	1,219	36	..	...	1	..	..	36	...
7	Ganjam Plains ...	9	9	2,615	460	106	30	60	92	110	150	228
AGENCY DISTRICTS												
8	Ganjam ...	4	4	2,415	57	7	..	...	10	6	7	11
9	Koraput ...	7	6	8	32	2	8	3	1	5	3	13
Total of Agency districts		11	10	2,423	139	9	8	3	11	11	10	24
Total for the Province		85	82	21,424	6,871	1,355	1,168	1,289	1,206	1,340	1,366	1,954

DIX I—contd.

of Orissa Province during each month of the year 1947

					6			7			8	1
August	September	October	November	December	Total			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	Serial No.
					Male	Female	Total	Male	Female	Total		
1,068	899	730	646	707	5,227	4,439	9,666	3.80	3.70	4.16	3.75	1
77	88	47	67	69	403	326	729	0.76	0.62	0.69	0.57	2
361	323	226	163	172	1,772	1,515	3,287	3.21	2.55	2.87	2.79	3
428	408	214	124	99	1,226	871	1,997	1.82	1.86	1.61	1.19	4
2	10	...	7	5	30	19	49	0.33	0.21	0.27	0.32	5
...	5	3	1	...	18	28	46	0.41	0.61	0.54	0.11	6
250	125	155	106	113	830	695	1,525	1.23	0.88	1.05	2.08	7
17	8	9	3	2	43	37	80	0.24	0.20	0.22	0.24	8
13	11	5	4	2	36	34	70	1.41	1.36	1.38	1.67	9
80	19	14	7	4	79	71	150	1.39	1.34	1.37	0.40	
2,216	1,877	1,389	1,121	1,169	9,485	7,964	17,449	2.48	1.95	2.20	2.19	

ANNUAL FORM NO. XI—*Death registered from Respiratory diseases in the districts of*

1	2			3		4		5						
Serial No.	Districts			Circles of registration		Villages		January	February	March	April	May	June	July
				Number in each district.	Number from which deaths from respi- ratory diseases were reported.	Number in each district.	Number from which deaths from respi- ratory diseases were reported.							
1	Cuttack	..	..	13	13	5,760	1,050	115	131	143	185	108	70	95
2	Balasora	...	...	10	10	3,426	125	6	3	6	65	8	9	8
3	Puri	...	...	6	6	2,913	447	83	71	83	81	61	72	63
4	Sambalpur	...	...	27	26	2,595	926	85	82	112	119	105	110	108
5	Angul	...	...	5	4	478	14	2	...	3	..	..	2	2
6	Khondmals	...	...	4	3	1,219	2	...	...	1	...	...	5	...
7	Ganjam Plains	...	...	9	9	2,615	782	184	24	18	29	68	107	84
AGENCY DISTRICTS														
8	Ganjam	...	...	4	4	2,415	43	15	..	..	4	4	1	4
9	Koraput	...	...	7	3	8	7	..	..	..	2		3	1
Total of Agency districts				11	7	2,423	50	15	..	..	6	5	4	5
Total for the Province ...				85	78	21,424	3,356	490	311	366	385	355	379	365

DIX I—contd.

Orissa Province during each month of the year 1947

					6			7			8	1
August	September	October	November	December	Total			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	Serial No.
					Male	Female	Total	Male	Female	Total		
92	95	100	104	107	720	525	1,245	0·64	0·44	0·54	0·57	1
4	17	8	12	4	59	91	150	0·11	0·17	0·14	0·08	2
73	61	54	58	68	480	348	828	0·87	0·59	0·72	0·84	3
151	137	93	83	91	826	450	1,276	1·34	0·70	1·01	1·04	4
2	1	1	...	2	11	4	15	0·12	0·04	0·08	0·07	5
...	...	...	...	..	6	...	6	0·13	..	0·07	0·09	6
120	91	128	130	141	581	543	1,224	0·86	0·69	0·77	0·64	7
10	6	7	7	7	35	30	65	0·20	0·16	0·18	0·15	8
...	..	3	2	5	11	6	17	0·43	0·24	0·34	0·67	9
10	6	10	9	12	46	36	82	0·23	0·17	0·20	0·21	
452	408	394	396	425	2,729	1,997	4,726	0·71	0·49	0·60	0·59	

ANNUAL FORM NO. XII—Deaths registered from plague in the

1	2	8	4		5
No.	Districts	Circles of registration. Number in each district Number from which deaths from plague were reported.	Villages Number in each district Number from which deaths from plague were reported	January February March April May June	
			Nil		

DIX I--concl'd.

district of Orissa Province during each month of the year 1917

						6	7			8	1			
July	August	September	October	November	December	Total			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.	
						Male	Female	Total	Male	Female	Total			
Nil														

APPENDIX II

PROVINCIAL

Statement showing details of registration in areas in which it is compulsory

Compulsory registration area	Mid-year population	Probable number of births at the rate of 286 per 1,000 married women between the ages of 15 and 40.	Actual number of births registered during the year.	Probable birth rate per mile (col mns 2 and 3).	Registered birth-rate, per mile during the year.	Number of deaths registered during the year.		Death rate per mile		Number of persons prosecuted under Act IV (B. C.) of 1873.	Number of persons convicted.
						Including deaths in dispensary	Excluding deaths in dispensary	Including deaths in dispensary.	Excluding deaths in dispensary.		
1	2	3	4	5	6	7	8	9	10	11	12
Cuttack	89,010	..	2,050	..	25.02	1,796	1,471	22.45	18.33	..	..
Kendrapara	11,412	..	278	..	24.36	452	401	39.61	35.14	..	..
Jaipur	11,511	..	107	..	9.10	306	141	34.40	12.25	..	..
Bilasoro	20,353	..	147	..	7.21	276	196	13.63	9.61	..	..
Puri	43,765	..	1,243	..	31.04	1,265	1,000	31.55	37.93	..	..
Sambalpur	18,284	..	160	..	8.70	107	125	10.71	6.80	..	..
Berhampur	47,197	..	2,215	..	46.93	1,257	934	26.63	18.88	..	..
Parlakimedi	21,656	..	627	..	28.95	410	366	18.3	18.91	..	..
Total	25,823	..	6,927	..	27.20	6,151	5,244	24.23	20.62	..	..

APPENDIX III

Table showing health services in rural and urban

Rural Areas												
District Board			Medical Officers of Health				Epidemic staff.	Sanitary and Health Inspectors.	Vaccinators		School Medical Officers.	Other Health staff.
			Holding D. P. H.		Licentlates L. P. H.				Male	Female		
			Whole-time.	Part-time.	Whole-time.	Part-time.						
1			2	3	4	5	6	7	8	9	10	11
Cuttack	...	...	1	...	...	...	2	19	44	...	...	26
Angul	...	...	...	...	...	...	...	2	4	...	...	2
Balasore	...	...	1	...	...	...	1	11	20	1	...	15
Puri	...	...	1	...	...	...	12	10	21	...	...	11
Sambalpur	...	...	...	...	...	...	4	8	23	...	...	10
Ganjam plains	...	...	1	...	...	...	...	12	32	4	...	11
Ganjam Agency	...	}	...	...	...	...	...	5	18	..	...	8
Khondmals	...											
Koraput	...	...	...	...	1	...	...	10	24	3	...	22
riasa Province	...	...	4	...	1	...	19	77	186	8	...	105

DIX III

areas of Orissa Province during the year 1947

Urban areas											
Municipalities	Medical Officers of Health				Sanitary and Health Inspectors.	Vaccinators		Inspector of Vaccination.	School Medical Officers.	Other Health staff.	
	Holding D. P. H.		Licentiates L. P. H.			Male	Female				
	Whole-time.	Part-time.	Whole-time.	Part-time.							
12	13	14	15	16	17	18	19	20	21	22	
Cuttack	7	2	1	...	1	9	
Kendrapara	1	1	...	...	...	2	
Jajpur	1	...	...	...	...	2	
Balasore	1	...	...	...	...	2	
Puri	1	...	...	2	2	1	...	...	4	
Sambalpur	1	2	1	...	...	...	3	
Berhampur	1	3	2	..	...	...	4	
Parlakimedi	1	1	...	...	...	2	
Crissa Province	1	...	2	...	18	9	2	...	1	28

APPENDIX IV

Table showing maternity and child welfare centres, health visitors and trained midwives in rural and urban areas in the Province of Orissa during the year 1947

District	Maternity and child welfare												Remarks
	Centres maintained by—						Trained visitors	Trained midwives	Trained dais				
	Government		Local and municipal bodies.		Other agencies								
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cuttack	1	1	...	1	...	1	1	7	
Balasore	2	1	...	...	...	1	2	4	
Puri	1	1	...	...	...	...	1	1	6	
Sambalpur	1	1	...	...	...	...	..	1	1	4	
Ganjam	2	1	...	1	..	...	2	4
Koraput	3	...	...	...	...	...	3	...
Total	1	2	1	8	3	...	2	...	4	10	25

Vaccination

STATEMENT No. I

STATEMENT NO. I. - Showing particulars of vaccination in the

Serial Number	District	Midyear population	Total number of persons vaccinated			Primary		
			Male	Female	Total	Total	Under one year	
1	2	3	4	5	6	7	8	
1	Cuttack	{ District excluding towns ... 22,18,900	1,32,264	64,052	1,06,316	28,743	1,653	
		{ Towns ... 1,02,933	9,218	3,506	12,814	1,797	235	
2	Balasore	{ District excluding towns ... 10,33,623	44,513	25,548	70,061	12,881	1,363	
		{ Towns ... 20,393	1,369	1,210	2,579	189	50	
3	Puri	{ District excluding towns ... 11,00,974	55,861	33,030	93,391	27,289	1,889	
		{ Towns ... 43,265	2,502	2,354	4,856	1,271	137	
4	Sambalpur	{ District excluding towns ... 12,35,345	33,823	18,727	6,950	14,732	7,903	
		{ Towns ... 18,334	911	304	1,215	229	72	
5	Angul	... 1,31,958	14,623	6,624	21,247	2,739	1,242	
6	Khondmals	... 89,629	3,784	2,462	6,246	2,395	770	
7	Ganjam	{ District excluding towns ... 10,17,619	84,940	59,382	1,44,322	46,022	12,828	
		{ Towns ... 68,863	10,330	9,331	19,661	1,002	793	
8	Koraput	... 12,30,522	60,234	51,300	1,11,534	31,159	2,520	
Total of Vaccination Department.		{ District excluding towns ... 99,11,560	4,34,442	2,36,125	6,70,567	1,65,965	31,189	
		{ Towns ... 2,53,828	24,330	16,795	41,125	5,388	1,287	
		{ Total ... 92,65,388	4,58,772	2,52,920	7,11,692	1,71,353	32,476	
Jails		...	6,236	304	6,540	88	3	
Total of Railway Dispensary		...	53	22	75	..	..
Cooly Depot		...	2,531	1,186	3,717	..	...
Grand Total		...	92,65,388	4,67,592	2,54,432	7,22,024	1,71,441	32,479

districts of Orissa during the year 1947

Vaccination				Re-vaccination			Percentage of successful cases in which the results were known		Number of all successful vaccinations and re-vaccinations performed by the vaccination staff only.	REMARKS
Successful				Total	Successful	Unknown	Primary	Re-vaccination		
One year and under five years	Five year and under ten years	Total of all ages	Unknown							
9	10	11	12	13	14	15	16	17	18	19
13,334	9,943	26,935	1,234	1,37,568	48,302	52,718	97.89	56.93	75,237	
1,294	29	1,558	95	11,017	1,635	3,478	91.70	21.69	3,193	
8,451	952	10,810	1,770	57,180	39,767	12,517	97.29	89.04	50,577	
124	12	183	...	2,390	2,260	10	98.41	94.56	2,446	
14,784	4,127	20,791	5,817	66,602	24,836	30,25	96.83	68.46	45,627	
1,040	94	1,271	...	3,585	269	215	100.00	8.00	1,540	
4,524	558	12,995	1,757	42,198	12,435	29,763	99.74	100.00	25,430	
144	12	225	1	986	195	791	100.00	100.00	423	
1,099	..	2,362	376	18,508	3,757	12,362	99.99	61.12	6,119	
1,454	..	2,231	100	3,851	1,45	494	97.21	42.45	3,656	
24,667	1,343	38,910	4,485	98,300	26,192	17,691	93.67	32.49	65,102	
982	..	1,775	18	17,759	4,338	3,360	99.1	30.13	6,113	
18,948	3,717	26,185	2,487	80,335	27,499	17,744	91.42	43.71	53,684	
87,365	20,645	1,41,219	18,026	5,04,002	1,84,213	1,73,614	95.46	55.65	3,25,432	
3,584	147	5,018	117	35,737	8,697	7,864	95.20	31.20	13,715	
90,949	23,792	1,46,237	18,143	5,40,339	1,92,910	1,81,478	95.45	53.76	3,39,177	
7	69	79	9	6,452	3,160	660	100.00	54.56	3,239	
7	1	8	...	75	..	..	100.00	...	8	
...	..	...	...	3,717	..	...	...	...	...
90,963	20,862	1,46,324	18,152	5,50,583	1,96,070	1,82,138	95.46	53.21	3,42,194	

SUMMARY

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which the results were known.		Number of children successfully vaccinated			Ratio of successful vaccinations per 1,000 of population.	Remarks		
	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination	Under one year	One year and under five years.	Five years and under ten years.				
1	2	3	4	5	6	7	8	9	10	11	12		
BY SPECIAL STAFF													
Statement (I)...	1,71,353	5,40,339	1,71,353	5,40,339	95.45	53.76	22,476	90,949	20,792	43.26			
BY OTHER AGENCIES.													
Ltts. Railway dispensaries and cooly depot.	88	10,214	88	10,214	110.13	32.97	8	14	70				
Total	1,71,441	5,50,553	1,71,441	5,50,553	95.46	53.21	32,479	90,963	20,862	43.16			

Comparative Statement No. II—Showing the percentage of persons primarily vaccinated to the total number of vaccinations performed in the Province of Orissa in each of the undermentioned official years.

Establishments	Years										Remarks
	1938-39	1939-40	1940	1941	1942	1943	1944	1945	1946	1947	
1	2	3	4	5	6	7	8	9	10	11	12
Government staff	47.92	44.17	30.84	23.27	22.30	29.15	23.59	25.50	21.25	20.38	*Performed by paid vaccinators with effect from 1-2-1947,
Municipality	14.25	10.37	11.39	17.51	15.41	16.15	11.84	5.52	7.79	13.10	
District Board	28.27	25.36	24.06	17.91	15.04	19.08	19.22	18.52	15.74	30.04	
Licensed vaccinators	64.62	51.97	54.84	51.18	54.66	28.78	25.20	17.99	24.95	*42.80	
Railways	17.68	31.69	..	..	...	23.21	21.74	14.47	7.96	10.67
Jails	1.13	0.99	0.82	0.33	0.50	0.43	0.71	1.33	1.07	1.34	
Cooly depot	3.97	8.25	..	3.63	

Statement No. III—Showing particulars of vaccination

District	Total number of persons vaccinated.		Total number inspected—								Percentage of	
			By Assistant Directors of Public Health or Superintendents of Vaccination.				By other Inspecting Officers				By Assistant Directors of Public Health.	
			Assistant Directors of Public Health.		Superintendents of Vaccination.		Health Inspectors		Other Staff		Assistant Directors of Public Health.	
	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination
1	2	3	4	5	6	7	8	9	10	11	12	13
Cuttack ...	39,555	1,50,575	324	759	1,336	1,864	6,914	10,654	...	...	1.06	0.50
Balasore ...	12,072	60,453	...	...	...	...	1,359	4,511	...	...	...	...
Puri ...	28,612	71,010	...	...	325	745	4,440	5,040	...	...	...	...
Sambalpur ...	14,981	43,591	...	...	500	2,500	7,000	14,000	7,481	27,091	...	...
Angul ...	2,739	18,503	...	...	98	12	688	3,710	...	...	...	...
Khondmals ...	2,295	3,851	...	...	...	...	1,081	1,811	1,214	1,408	...	...
Ganjam ...	47,948	1,17,641	...	...	1,987	3,731	23,189	30,610	33,488	72,962	...	...
Koraput ...	31,139	84,554	...	...	126	664	20,856	43,001	5,274	10,497	...	...
Total ...	1,71,441	5,50,583	324	759	4,377	9,266	65,527	118,937	47,457	112,018	0.19	0.14

verified by Inspecting Officers during the year 1947

Inspection to total number vaccinated.						Percentage of cases found successful to total number inspected—										Percentage of successful cases reported by Vaccinators.	
By Assistant Directors of Public Health or Superintendents of Vaccination.		By other Inspecting Officers				By Assistant Directors of Public Health or Superintendents of Vaccination.				By other Inspecting Officers							
Superintendents of Vaccination.		Health Inspectors		Other Staff		Assistant Directors of Public Health.		Superintendents of Vaccination.		Health Inspectors		Other Staff					
Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination		
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
4'37	1'24	22'63	7'07	...	...	88'89	11'72	90'57	12'98	92'25	20'04	..	...	97'54	53'38
...	..	10'40	7'46	...	...	...	...	..	..	95'80	83'05	..	...	97'31	88'99
1'13	1'05	15'52	7'10	...	...	...	...	100'00	..	94'73	23'91	..	...	97'01	62'13
3'34	5'74	46'73	32'12	49'94	62'15	...	...	88'00	28'64	83'06	28'26	88'05	28'16	100'00	100'00
3'58	2'23	25'12	20'04	...	...	...	...	93'88	42'72	95'78	32'81	...	...	99'96	61'13
...	...	45'13	47'03	50'69	38'90	...	...	...	...	96'11	37'21	93'19	50'13	97'21	42'45
4'14	3'17	48'36	26'02	69'84	62'02	...	...	95'32	55'05	66'67	33'73	91'74	34'07	93'70	32'96
0'40	0'78	66'98	57'21	16'94	12'32	.	..	57'14	44'14	94'25	41'76	92'75	36'32	91'42	41'86		
2'55	1'80	38'22	21'00	27'68	20'34	88'89	11'72	92'25	35'31	83'73	36'72	91'41	33'07	95'46	53'21		

Statement No. IV—Showing side by side the ratios per mile of population of deaths from Small-pox.

District	1938-39		1939-40		1940		9-1	
	Ratio of deaths from small pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small pox.	Ratio of successful vaccination per mille of population.
1	2	3	4	5	6	7	8	9
Cuttack	0·06	30·04	1·82	38·51	0·54	33·28	1·38	25·55
Balasore	0·05	34·82	0·18	40·10	0·42	42·06	0·54	49·50
Puri	0·06	37·59	0·21	43·46	0·63	47·11	0·42	60·13
Sambalpur ... ..	..	104·19	0·12	63·25	0·25	29·85	0·20	25·63
Angul	0·01	101·02	0·04	52·09	0·06	66·06	0·11	81·29
Khondmals	0·05	47·22	...	69·93	...	74·30	...	71·22
Ganjam	0·23	49·78	0·14	65·64	0·26	77·23	0·98	89·72
Koraput	0·22	38·49	0·01	37·15	0·14	40·05	2·21	56·79
Total ..	0·11	47·74	0·59	46·94	0·58	46·05	0·81	51·30

and the ratios of successful vaccinations per mille of population during the years ending 1947

1942		1943		1944		1945		1946		1947	
Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.
10	11	12	13	14	15	16	17	18	19	20	21
1.02	39.05	0.66	74.64	1.36	68.40	2.34	71.77	1.45	65.4	0.23	33.78
0.43	85.92	0.75	84.41	3.07	130.01	2.65	121.09	0.32	111.28	0.05	50.20
0.18	48.14	0.09	46.60	0.46	49.47	2.3	56.40	0.90	68.88	0.25	42.33
0.21	28.67	1.17	25.48	0.97	15.87	0.80	15.49	0.93	18.86	0.31	20.57
0.37	55.72	0.03	37.19	0.06	39.97	0.10	59.60	0.20	55.16	0.23	33.63
0.50	83.26	0.05	60.61	0.02	70.04	0.06	67.54	0.02	51.55	..	40.79
0.47	72.75	0.25	59.71	0.05	53.79	0.09	54.25	0.11	67.89	0.09	35.85
0.02	57.11	0.22	43.10	0.02	36.97	0.68	40.63	0.01	35.76	0.32	43.6
0.48	54.28	0.55	57.64	1.05	58.62	1.54	60.10	0.79	66.22	0.21	36.60

Shute

